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ABSTRACT

Guidelines are presented for organizing programs and modifying activities in physical education programs for children with a wide range of physical and emotional disabilities. The guidelines should result in a program that allows students to work to their maximum potential within the framework of regular physical education classes. In planning the program, it is essential that a planning committee, composed of the teacher, school administrator, school nurse, a doctor, school counselor, and parents, work together to form an individualized program for each child. Chapters are included on programs for children with hearing impairments, emotional disturbances, orthopedic impairments, visual impairments, spinal deviations, specific learning disabilities, weight problems, and below average physical fitness and psychomotor skills. Each chapter contains a discussion of the disability's characteristics, suggested teaching methodology for physical education, and suggested activity areas, as well as techniques for assessment and evaluation of the child. References for further study on the problem are included at the end of each chapter. The appendix contains a bibliography of available audiovisual materials, instructional materials, and children's books. Also provided are the addresses and descriptions of three validated programs for individualizing physical educational programs for handicapped children and a sample physician's referral form. (JD)

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Adapting Physical Education:

A Guide For Individualizing Physical Education Programs

Pennsylvania Department of Education
Bureau of Curriculum Services
Division of Health, Science and Technology
June 1980

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF EDUCATION
HARRISBURG, PENNSYLVANIA 17126

ROBERT G. SCANLON
SECRETARY OF EDUCATION

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Dear Colleague:

An appropriate educational program for the vast number of exceptional students in our schools is a significant responsibility as well as a challenge to teachers and administrators. Physical education should be a part of each exceptional student's program.

The general program of physical education is designed for students who do not have restrictions placed upon their activity. Many exceptional students however may neither safely nor successfully take part in the general program. It is essential that we provide a program of physical education designed for each student's abilities so that a full and appropriate education is provided.

This guide will help teachers and administrators plan and conduct a good physical education program for exceptional students and in doing so contribute to making every school a good school.

Sincerely,

Robert G. Scanlon

ACKNOWLEDGEMENTS

A publication of this scope is not easily developed. A lot of effort was given by persons committed to providing physical education programs to exceptional children.

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INTRODUCTION

Schools are now accommodating students with a wide range of physical and emotional capacities. The Department has prepared this publication to assist teachers and school administrators to plan physical education programs for these students.

Because of the wealth of material already available on specific disabilities, the ideas presented here are intended as general guidelines for organizing programs and modifying activities. These are suggestions only; starting points for creative and resourceful planning.

Supplementing the general material are chapters on screening and programming for students with postural deviations, low motor skills, low physical fitness and nutritionally-based problems (such as obesity). Students with these characteristics are not usually thought of as needing adapted physical education. However, large numbers of students have these problems and the physical education programs should be individualized to meet their needs.

All children can successfully participate in some physical activities. To help them discover the enjoyment that such activities can provide, develop their physical capacities to the fullest and prepare themselves for a life time of physical recreation, it may be necessary to provide individualized physical education programs. By considering a child's unique qualities, we can provide unlimited opportunities.

I. CONCEPTS OF INDIVIDUALIZED PHYSICAL EDUCATION

Individualized physical education is a diversified program of developmental activities adapted to the interests, capacities and limitations of students so that they may safely and successfully engage in physical education program activities.

Every student capable of attending school can take part in the benefit from participation in a physical education program. Boys and girls unable to participate in a regular activity program for physical, psychological or other reasons, can successfully engage in programs specially designed to meet their individual needs. These students may be integrated to varying degrees in regular activities or units that are consistent with their functional capabilities.

Children who might need special programs include those with conditions such as hearing impairments (deaf and hard of hearing); illness and infirmity; low physical fitness, specific motor deficiencies, and physical underdevelopment; mental retardation (mild, moderate, severe and profound); neurological impairments and brain damage; physical and orthopedic handicaps (postural problems, inefficient body mechanics); special health problems (cardiac disorders, multiple sclerosis, muscular dystrophy, obesity, malnutrition, diabetes, asthma); serious maladjustments, emotional disturbances, and social maladjustments; and visual handicaps (blindness and partial sightedness); or those who are culturally, socially, or economically deprived.

Disabilities vary in degree of severity and may be temporary or permanent. Some infirmities may require a *modified* program of activities to accommodate abilities. Or a child may need a *remedial* program which uses specific body movements to restore normal strength and function. An individualized program could combine both modified and remedial activities to provide alternatives to the regular physical education program or may be applied *in addition* to participation in a regular class program.

For example, a child with a broken arm might be assigned modified activities while in a cast and be given exercises to maintain strength in the injured arm. The child would later return to full participation in the regular physical education program.

On the other hand, a wheelchair bound student might not be able to participate in some activities, even if modified, but could independently study another sport. This student might work on an independent study unit in archery, riflry or bowling, while the rest of the class is having gymnastics. When the term of study ends, the child returns to the regular class (and modified activities provided only as necessary.)

The goal is a program that allows a child to work to potential within the framework of regular physical education classes to the maximum possible extent. Of greatest importance is the fact that a child placed within a regular class will be "functionally" capable of performing in a specific activity or activities so as not to interrupt the continuity of class activities to be performed by their non-handicapped classmates.

The concept of individualizing programs also extends to those children or adolescents who may develop temporary irrational behaviors or fears. Some behaviors may indicate physical or psychological problems requiring the care of a physician or psychologist but many merely call for sensitivity and flexibility by the teacher.

For example, an over- or underdeveloped adolescent may be reluctant to undress or shower with his or her classmates. An obese child may be embarrassed by physical inadequacy in an activity such as gymnastics for which he or she is too heavy. A physically underdeveloped child may have a similar embarrassment about low physical strength. Or a child may have religious prohibitions against certain activities. The teacher should use administrative as well as instructional techniques to adapt the physical education program to accommodate the needs and capacities of the student. The teacher should use means to remediate the cause of the problem in the case of the obese or low strength student while not requesting the child to demonstrate his/her inability. The child who is embarrassed to dress or shower with others may be permitted to come to class early to dress and leave early to shower. Students with religious restrictions should be given independent study assigments or permitted to dress to comply with religious beliefs.

An individualized physical education program should be designed to:

- Accomplish needed correction for conditions that can be improved or removed.
- Aid in the adjustment and resocialization of the invidicual when the impairment is permanent.
- Protect the condition from aggravation by acquainting the student with his capacitieis and limitations and arranging a program within his physiological work capacity or exercise tolerance.
- Provide students with an opportunity to develop organic power within the limits of the impairment.
- Provide students with an opportunity to develop skills in recreational games and lifetime sports within the limits of the impairment.
- Provide students with an opportunity for normal social development through sports and games appropriate to their age group and interests.
- Contribute to security through improved function and increased ability to meet the physical demands of daily living.
- Provide students with physical education instruction that is both "appropriate" and applied withing the "least restrictive environment".

These concepts of programming for individual needs are required by recent federal legislation: Section 504 of the Vocational Rehabilitation Act of 1973 and P.L. 94-142, the Education for All Handicapped Children Act of 1975. In essence, these are civil rights laws governing educational programs for the handicapped. The laws extend to this group of people the equal rights guarantee of the 14th Amendment.

P.L. 94-142 and Section 504, briefly, guarantee the right to a "free appropriate public education at no cost by parent or guardian" and that this education *must* be provided in the "least restrictive environment" in order to meet the "unique needs" of a handicapped child. P.L. 94-142 also provides the right to "special education services including physical education" when necessary. In any case, physical education programs *must* be provided whether specialized or to varying degrees in the regular class to each and every handicapped child (there are no "loopholes" in this legal requirement.) These laws prohibit discrimination against the handicapped; reestablish the right to education for all students; and establish the right to compensatory education. The practical effect of these provisions should be: (1) education in the least restrictive setting possible; (2) same educational opportunities for both handicapped and non-handicapped, including non-academic and extra-curricular activities; (3) access to education for all, including the profoundly handicapped, from age three to 21; and (4) individualized instruction (through an individualized educational program–IEP) even when integrated within the regular class environment, i.e. mainstreamed.

P.L. 94-142 also establishes procedural safeguards–due process procedure–to help parents, children and school district assure these rights.

The implication of these laws for physical education and related programming is clear. Physical education, in fact, is the only curricular area included as a "direct service" under P.L. 94-142's definition of special education. By statute, physical education and recreational and athletic experiences must be offered to special education students as they are offered to non-handicapped.

Students who are obese or malnourished, or who have low physical fitness or poor motor development could be classified as special under P.L. 94-142's "other health impaired" provision provided the condition adversely affected the child's education performance. The Pennsylvania Department of Education believes, however, that these students, too, have a right to appropriate physical education under provisions of P.L. 94-142.

P.L. 94-142 and Section 504 echo the long-established provision of the Pennsylvania School Code which calls for "courses of study adapted to the age, development, and needs of the pupils." Based upon this premise, the State Board of Education made effective in 1966 curriculum regulations mandating adapted physical education for all students who are unable to participate in the regular program. Presently, section 5 25(c) of the General Curriculum Regulations provides:

> An adapted physical education program designed to meet the individual need of boys and girls shall be included in the planned program at the elementary, middle and/or junior high and senior high levels.
>
> The adapted physical education program shall be available to boys and girls who, for physical, psychological or other reasons are unable to participate in the regular physical education program.

The department would like to stress that P.L. 94-142 stipulates that educational service provided at all levels is to be conducted to the maximum degree possible with non-handicapped children In addition to providing individualized programs of physical education, schools must integrate these programs with regular classes whenever feasible.

Of particular importance to this publication is an understanding of a district's responsibility to the student who will require individualized physical education though he or she may participate to some degree in a regular academic program. It is clear that a handicapped student must have special physical education needs considered when an IEP is developed for that student. The student not receiving special education services as designaged by P.L. 94-142, however, need not have an IEP. Special physical education needs might therefore be overlooked. The student could be designated as special under guidelines established by the law and therefore be eligible for an IEP. The department maintains that this should not be necessary to protect the child's rights to individualized physical education programming.

II. ORGANIZATION AND ADMINISTRATION

Definition of Terms

Adapted physical education: any adaptation made in the regular curriculum to accommodate a student's need.

Modified physical education: that part of the adapted program which accommodates the capacity of the child and in so doing alters the regular physical education program.

Remedial physical education: that part of the adapted program designed to remediate a condition that a student may have, i.e., low physical fitness, poor motor coordination.

The Planning Committee

The cooperation of many, diversely skilled people is necessary for an effective adapted physical education program. Physical education teachers, school nurses and physicians, guidance counselors and school administrators in committee can plan and oversee the operation of programs that are designed for students in need of individualized physical education. The adapted physical education committee in each school building could set policy, arrange evaluations and develop individualized programs. By facilitating communications among everyone involved with the adapted programs, the committee insures that all children have their special needs met.

Classroom teachers, parents, students and other resource people can provide consultation and assistance as needed. A district committee should coordinate programs among schools and guarantee a consistent educational progression from pre-school through the secondary grades.

As an example of the kinds of policy matters that might be brought to the committee is a consideration of independent study contracts. If a student cannot participate in the regular class, however modified, or needs remedial work, an independently pursued course of study should be designed for the student's needs. The adapted physical education committee should make recommendations regarding program development implementation and evaluation of courses designed to meet individual needs of students.

The American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) has developed a physician's referral form which is included in the appendix on page 157. It is especially useful for individualized physical education programming because while the physician provides diagnostic information about the condition, the physical educator is responsible for completing the details of the program.

Individual members of the committee would be responsible for specific tasks.

Teacher

The teacher of individualized programs could

- Prepare the medical forms, school administration forms, and the physical education class forms necessary to carry out individually prescribed programs of physical activity.
- Carry out the instructions indicated on the medical referral form by the doctor.
- Evaluate students by visual screening and testing instruments with proven validity to identify those with special needs and make appropriate referrals.

- Help develop an individual educational program for an exceptional child, related to an appropriate placement within the physical education program.
- Record the child's progress and the program's effectiveness.
- Interpret the potentials and results of the program to parents, physicians and the community.
- Serve as a resource person and advisor for programs such as Special Olympics and wheelchair games.
- Conduct the individualized education program and prescribe activities for the children.
- Manage an instructional environment where present levels of educational performance are documented.

Doctor

A physician, the only committee member legally qualified to diagnose and prescribe for a child should:

- Clarify questions that arise concerning medical approval for a child's participation in activities.
- Process and make referrals of students with problems
- Prescribe for children who have no family physician.
- Inform members of the medical profession of the nature and scope of the individualized program.

School Administrator

In addition to serving on the policy development committee, a school administrator can contribute to the individualized physical education program by:

- Providing adequate barrier-free space, proper equipment and qualified and interested personnel.
- Scheduling classes for children assigned to the program.
- Providing the teacher with supplies for communications and records.
- Facilitating communications among committee members and parents, teachers and students.
- Providing related services such a transportation.
- Developing community resources and assisting the teacher to use them.

School Nurse

The school nurse should work closely with the physical education teacher and the doctor by:

- Maintaining a liaison between the home and the school.
- Informing the teacher of any condition that may temporarily limit a child's participation when it may not be necessary to refer the student to the doctor.
- Referring the child to the physician if there is a question about the student's ability to participate in the regular program.
- Serving as a consultant to the physical education teacher.
- Maintianing medical records.

School Counselor or Psychologist

The guidance counselor or school psychologist contributes to the success of the program by doing the following:

- Identifying behavioral problems for the physical education teacher.
- Evaluating the effects of participation upon the emotionally disturbed pupil.
- Recommending program ideas of changes.
- Serving as consultant to the physical education teacher regarding the mental health of children assigned to special classes.

Parents

Parents may assist in developing general policy for the individualized program. If their own child has special needs, the parents may:

- Assist the child in developing a healthy attitude about the program.
- Provide encouragement to the youngster who is practicing home exercises designed to reinforce work being done in the school.
- Help the child follow a recommended diet.
- Contribute to the educational development through extensions of instruction in the home.
- Assist with the revision of the IEP based on the observed development of the child as compared to the stated measurable goals on the IEP.

The community can provide to the committee other valuable sources of assistance. Volunteer health agencies, local hospitals or universities, service clubs, intermediate units, parent and teacher organizations or allied health occupations may be called upon for help. One source of assistance comes from groups of people who have handicapping or limiting conditions. Community organizations of blind persons, wheel chair bound individuals and others can help plan and in some cases assist the student with limited capacities in the physical education program.

The adpated physical education committee is not the only body concerned with individualizing programs. Exceptional children must have an individualized educational program that includes physical education drawn up by an IEP committee. It is important that the two groups communicate about their programs and goals.

One element in the success of the individualized physical education program is communication and cooperation between the school and community. A good public relations campaign can acquaint the community, school, students and parents with the scope and value of the program.

Good communications have many facets. It includes:

- Professional orientation of medical and dental societies, public health personnel, school administrators and teaching colleagues.
- Lay level interpretation to pupils, parents, school patrons and the general public.

Employ all available media to explain the program, including:

- Written and oral orientation of students while they are in school.
- Informal telephone calls, letters, and visits to selected homes.
- Conferences with parents, physicians, public health personnel and others.
- Appearances at public meetings to describe the program and its objectives.
- Development of leaflets, pamphlets and other informational materials.
- Use of filmstrips, films, radio, television and newspaper for orientation of the public.
- Use of assembly demonstrations and exhibits, in school and for the community.

III. EVALUATING AND SCREENING STUDENTS

The American Alliance for Health, Physical Education, Recreation and Dance has published "Testing for Impaired, Disabled and Handicapped Individuals." In addition to evaluating a wide range of fitness, psychomotor and developmental tests, the book discusses the uses and values of testing. It points out that the purpose of testing is not just to get results for records. The authors draw these conclusions about testing:

1. Testing can be an important factor in assessing needs, diagnosing weaknesses, and prescribing activities.
2. Test results alone seldom provide complete answers or real understanding of individual problems, deficiences, and weaknesses.
3. Teacher observations, understanding of child growth and development, and knowledge of each child along with results from a variety of informal and formal screening instrument tests, rating scales, and profiles are among the ingredients required to make valid judgments about an individual's needs.
4. Motiviational techniques and strategies are vital to helping individuals improve.
5. Selective and judicious test usage is an important and integral part of teaching.
6. Testing is indeed teaching, but there is more to teaching than testing.

The book also suggests that the real value of testing is in determing a student's *strong points* as well as weaknesses. Programs can then be designed that use these strengths to overcome deficiencies.

These are some additional points to keep in mind:

. The tester must use language understandable by the student. It may be advisable to demonstrate the activity.

. A failure in a certain task does not absolutely confirm the existence of a problem in that area. The student may not understand what is expected or may be bashful, afraid or ill.

. A tester benefits from a quick and easy scoring system.

. It helps if the evaluator is acquainted with the student.

. Do not hesitate to modify a test to accommodate the special characterisctics of a child.

Students in need of an individualized program of physical education may be identified by a parent, doctor, school nurse or teacher. Physical educators, however, may detect conditions not apparent to others. This may come through informal observation of children during class or formal testing and evaluation. Specific screening procedures are discussed later; the following are general guidelines.

Skillful Observation

The President's Council on Physical Fitness has published these comments on observation of children's reaction to exercise:

Careful observation of children's reaction to exercise is an important part of the screening procedure. As has been stated, a poor reaction to exercise usually indicates poor physical condition rather than an acute or chronic disorder. However, it is advisable to check out all questionable cases. If a child reacts poorly to exercise, the parents should be notified. If there are health care professionals associated with the program, the child should be referred to them.

Here are the danger signals to look for:

- Breathlessness that persists long after exercise.
- Bluing of lips that is not due to cold or dampness.
- Pale, clammy skin or cold sweating during or after exercise.
- Unusual fatigue.
- Persistent shakiness after exercise.
- Muscle twitching.

There are other trouble signs that the teacher cannot observe but which may be reported by boys and girls. If any of the following symptoms are recurrent after exercise, notification of the school nurse is recommended:

- Headache.
- Dizziness.
- Fainting.
- Broken sleep.
- Digestive upset.
- Pain not associated with injury.
- Uneven heartbeat or severe pounding of heart.
- Disorientation or personality changes.

IV. SUGGESTIONS FOR MODIFYING ACTIVITIES

Since there are as many possibilities for individualized programs as there are individuals who need them, it would be impossible to discuss specific programming ideas here. However, there are some general considerations that should permeate the adapted physical education programs.

A great deal of literature is available on physical education for students with handicapping conditions. In addition to public and university libraries, a good source of material is the American Alliance for Health, Physical Education, Recreation and Dance.

Planning

The Pennsylvania State Board of Education requires planned programs of physical education and this is no less true for adapted programs than for regular physical education. If the child with speical needs is considered exceptional, then a program of adapted physical education should be part of the child's IEP as outlined in "*An Introduction to Individualized Education Program Plans in Pennsylvania Guidelines for School Age IEP Development*" published by the Pennsylvania Department of Education.

Teachers could make use of the publication's planning guides even if a child does not need an IEP. Alfred N. Daniel has stated that "*program goals must be specific; the skills must be sequential from the simple to the more complicated. Psychological aspects are equally as important as physical objectives. Keeping the child motivated requires imagination; exercise routines have to be changed frequently in order to maintain interest and effort.*" The results of a medical examination together with guidance from medical personnel should form the basis for program development.

Selection of Activities

In most cases, it is the intelligent selection of activities for the student that enables he/she to participate safely and successfully within the limits of his/her condition. Individualized programs generally employ regular activities adapted to special restrictions. It may be necessary, however, to modify the teaching method and not the activity. Mentally retarded students with good motor skills, for example, may participate in a regular program if special care is taken in giving instructions.

Many children who are permanently disabled have already developed adaptations which will permit them to take part in certain physical activities. These children should be permitted to proceed at their own rate of involvement, with the teacher suggesting alternatives if the appropriate adjustments cannot be made.

When dealing with a child new to the program, begin slowly with familiar activities. Some children will fear new experiences, become embarrassed because of their inability, or may show little interest. These early activities should focus on the child's abilities rather than disabilities.

Game rule modifications should not be discouraged and should reflect the needs and desires of the participants.

Attempt to keep the modified game as similar to the actual game as possible, so the children do not lose sight of what they are playing.

Adaptations in games and activities can be made in many ways. Reduce the range of the game by:

Decreasing the boundaries of the play area.

- Using implements that will not travel far.
- Attaching tethers to limit distance.
- Changing rules to limit the amount of force applied to implements.

Reduce the speed of moving objects by:

- Using lightweight balls.
- Making rules that limit amount of force used.
- Walking or hopping rather than running.
- Requiring an object to be punched or thrown rather than kicked.
- Playing ball games on grassy surfaces.
- Using sliding discs rather than balls.

It is advisable to use easily handled equipment such as plastic bats, partially inflated balls, fleece balls or implements with special grips or handles.

Use mechanical means to stablize the participant such as tripods, slings, braces, straps, and specialized terminal attachments on prosthetics.

Provide quiet table games on the sidelines which are similar to the actual activities being played on the field or court.

The physician's referral form developed by AAHPERD and found on page 157 lists three categories of restrictions. "Mild" restrictions indicate ordinary physical activity is appropriate but unusually vigorous efforts need to be avoided. The second category calls for "moderate" physical activity; sustained, strenuous efforts need to be avoided. A "limited" designation means ordinary physical activity needs to be markedly restricted.

Modifiation may be in the intensity of activity; duration of specific activity; total amount of activity during a school period; or elimination of certain activities for pupils whose disabilities make them susceptible to falls.

Interim Assignments

The teacher should select activities with care. If a doctor prescribes a period of total inactivity, the teacher may assign to the pupil:

- Reading assignments in physical education covering techniques and rules of various activities.
- Detailed observation and analysis of local or televised sporting event.
- Duties as an official, scorekeeper, or recorder during class or intramural activities.

The teacher should followup the interim assignment of no activity prescribed by the physician so as to not permit the assignment to become permanent. The physician should be approached with suggestions of exercise to inhibit muscular atrophy or hasten recovery.

Mild Category

A pupil in this category should participate in the regular physical education program with the exceptions indicated and approved by the physician. The specific exceptions may be modified instead of being eliminated entirely, provided there is medical approval. Modification of activities which have been designated as exceptions should in no way relieve the pupil from vigorous participation in other phases of the over-all program.

Moderate Category

Pupils in this category should participate in a wide variety of activities but the entire program should be moderated. There may be some pupils for whom particular activity exceptions are approved.

Examples of Modification of Program

A. Body Conditioning Exercises, Posture Exercises, and Relief Exercises.

- Decreasing the number of repetitions.
- Repetition in slower rhythm.
- Omitting certain body-parts or movements. For example, the pupil with a leg defect may be limited to performance of only the arm movements of the so-called "jumping-jack" exercise.

B. Rhythmic Activities, Marching, Dancing, Singing, Games, Fundamental Rhythmics.

- Decreasing number of repetitions.
- Substituting an alternate but related activity to class music; e.g., use rhythmic walking or gliding for skipping, running, or other vigorous movements.

C. Self-Testing Activities, Track and Field, Strength Events.

- Decreasing number of repetition/or taking fewer turns.
- Decreasing the vigor of the activity. Practice for form only instead of for distance, height, etc.
- Slowing the tempo by jogging instead of running for dash, etc.
- Competition to surpass other pupils or to improve a previous record should be limited or prohibited.
- Substitute a different but related activity; e.g., a short accuracy throw may replace a distance throw.
- Substitute a different but unrelated activity; e.g., a throw for distance or accuracy instead of running, etc.

- If physical disability is great, certain activities should be eliminated entirely and a substitute activity should be planned.

D. Rope Jumping.

- Duration of jumping should be reduced.
- Repetitions should be reduced.

E. Stunts.

- For certain organic conditions, stunts involving more than moderate muscular strength or effort may be contraindicated entirely.
- Where not prohibited, stunts are self-limiting by the local or central strength of the individual or by the nature of disability.

F. Apparatus and Tumbling Activities

- Emphasis should be placed on selection of simple exercises of short duration which involve only moderate expenditures of energy.
- Decreasing the duration; e.g., a pupil might perform a single forward roll and then rest before repeating instead of doing successive rolls.
- Omitting certain body-parts or movements; e.g., a pupil with severe leg impairment might do chinning on stall bars on rings in a straight hand, or in hand-lying position or do dipping in a kneeling position, instead of rope climbing. Some students with superior strength might be permitted to climb ropes without use of legs.
- A different but related activity may be substituted. A pupil who has some disabling condition of the arms might substitute a simpler but related exercise for a vault. The student might jump to a riding seat, rest momentarily, and then dismount sideward, instead of doing a front or flank vault.
- A different unrelated activity may be substituted. A pupil with a great disability of the feet and lower legs might do exercises in the hang position on the rings instead of exercises on the horse, buck, mats, etc. Exercises on the horizontal ladder might also be substituted.

G. Elementary Games, Ball Handling Games, Recreational Games

- Restricting the length of time pupil may be "it" or be the one chased.
- Limiting the number of times the pupil may run during a class period.
- In some cases, a pupil might be prohibited entirely from participating in the role of a runner.
- Restricting participation in ball games to short period of running, dodging, etc. if exertion required is moderate.
- Allowing student to bat but having another student run.

- Recreational games should include only moderate activity.

- Pupils might participate in all recreational games and practice some of the fundamental skills involved.

- Examples of such recreational activities are modified bowling; quoits; shuffleboard; table tennis; throwing; bouncing; and rolling balls; stilt walking; pogo sticks; target throws; accuracy throws; deck tennis; hand tennis; tether ball; table games; marbles; archery; croquet; roller skating; bicycle riding; hopscotch; etc.

H. Fundamental Sport Skills, Sports, Games, and Related Contests

- Decreasing the duration; e.g. the pupil either continues for a shorter over-all length of time, alternates the activity with another of much less intensity, or takes periodic rests between short repetitions of the activity.

- Omitting certain body-parts of movements or substituting moderate movements for the more strenuous ones in the basic activity; e.g., a pupil receiving a thrown football, basketball, or baseball might do so while walking or standing instead of while running.

- Slowing the tempo for the activity; e.g., instead of practicing volleying a volleyball over the net in the regular way, the pupil may throw the ball against a wall and catch it on the rebound.

- A related but less strenuous activity requiring the same sorts of skills may be stustituted.

- A different unrelated activity may be substituted.

- It may be necessary to prohibit entirely certain types of activity for particular individuals; e.g., running, jumping, and certain forms of throwing may be contraindicated, depending on the specific physical disability. In these cases the pupil should do some other physical activity.

- The emotions which are stimulated by competition in games induce the participants to strive to the utmost. The rules must sometimes be changed to insure moderation. Vigorous movements must be eliminated or made appropriately moderate.

- Sudden spurts of efforts and rough body contact must be barred. Each player should be confined to a prescribed area in which too much movement is impossible.

Limited Category

Relatively few pupils will be assigned to this category. Activities may be developed by further modification of moderate activities. In extreme cases some activities may be done in a sitting position. Frequent rest periods may be necessary for some of these pupils.

Other activities related to physical education can be assigned to students who cannot be active an entire period. These may include study assignments, rules and techniques of the activity in which the class is participating.

Some examples of modifications include:

1. Posture and Conditioning Exercises

- Exercise slower with less vigor. . Decrease number of repetitions.

2. Marching

   - Student may participate with the class in simple marching and tactical movements provided the pupil moves with a slow smooth walk instead of marching vigorously.

3. Rhythmic Activities

   - Dances and rhythmic step combination (walking, gliding and trunk swaying movements) in slow tempo are permissible.

   - In song games, rhythmic waling should be substituted for skipping and other vigorous movements.

4. Chasing and Fleeing Games

   - Student may participate provided he or she remains in the circle (or other formation) and does not participate in the running, skipping, etc.

5. Ball Handling Games

   - Skill development programs should be designed to include only limited running and jumping.

   - The student may be stationary or walking while performing ball skills.

6. Inactive Assignments, Games and Play

   - Pupils may practice individual skills while sitting.

   - Students could be assigned to view and study films and televised sporting events.

HEARING IMPAIRED*

Even before birth a child begins to learn through various sounds and other stimuli within the immediate environment. After birth the infant soon learns to discriminate between these sound stimuli and responds spontaneously to loud and soft, high and low, as well as pleasant and unpleasant tones. From the varied sounds in the environment the child also learns to determine the direction, distance, and the meanings of sound; and consequently differentiates its own babbling from sounds that come forth from the conversation and language of others. Pertinent to this last point, it is obvious that a child who has a hearing impairment, or is totally deaf, will not only have difficulty in the development of language, but will also have problems understanding verbal directions. Consequently, the child could appear to be either educationally retarded or defiant toward its parents and other authority figures. Becuase of the child's delay or absence in language development, the child will also have difficulty in developing an ability to communicate with others and express its own needs and desires.

The physical educator must be aware of the needs of the child who is hearing impaired, and must strive to develop an understanding of each child in order to communicate the essential information for appropriate performance behavior. In the vast majority of cases, the hearing impaired child has very little or no problems which would serve to inhibit the development of a normal motor behavior. The one thing that may serve to inhibit the child from achieving the optimal level of motor development would be the inability to establish a mode of communication. Once again, the instructor must identify the child in order to design effective programs. The physical education instructor must also be aware of the fact that the hearing impaired category of children range on a continuum from minimal hearing loss to functional deafness, and as a result, a variety of teaching techniques and methodologies which have been proven effective with these children are highlighted in this section.

Prevalence

Auditory handicaps with varying degrees of severity constitute one of the most common disabilities affecting children and adults. Approximately 35 out of every 1000 adults are afflicted with an auditory handicap, and eight (8) out of very 1000 school age children possess an auditory handicap of one kind or another.

There is evidence that hearing loss is on the increase. Reasons for this increase may be due to the lengthening life span; more infants are born with hearing loss because the mortality rate has decreased; more precise screeing procedures, and impact of modern technology and entertainment patterns.

Definitions and Categories of Hearing Impairments

Deafness refers to hearing loss so severe from birth or early childhood that normal language development is prevented. It may occur *congenitally*, apparent at birth, or *adventitiously* to normal hearing individuals because of accident or illness. *Partially hearing* (hard of hearing) refers to individuals who do not possess sufficient hearing loss to prevent the development of some language. The categories of hearing impairment consist of the following: (1) conductive impairment in which there is damage to the outer or middle ear, (2) sensori-neural loss indicates damage to the nerve endings of the inner ear or cochlea, (3) central impairments are the result of damage to the auditory pathways in the central nervous system.

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Measurement and Classification

The decibel is used as the standard unit of measure when determining the amount of hearing loss. Decibel loss refers to the increase of the units of sound that are required for a hearing impaired person to hear at the same level as the normal person hears. The most commonly accepted classification of hearing impairment divides the types of losses into five categories. These are: (1) mild - 20 to 30 decibel loss, speech usually normal; (2) marginal - 31 to 40 decibel loss. cannot understand normal conversation at a distance of three feet; (3) moderate - 41 to 60 decibel loss, usually have language impairment and requires amplification; (4) severe - 61 to 75 decibel loss, considered "educationally deaf"; (5) profound - 75 decibel or greater, considered totally deaf.

Behavioral Characteristics

The single greatest handicap resulting from hearing loss is the acquisition of speech and language. If deaf from birth or before speech develops, language will be absent or profoundly impaired. Language functions are classified as expressive (speaking and writing) and receptive (hearing and reading). Children with severe auditory handicaps experience problems with some aspects of both of these functions.

Deaf and hard-of-hearing children have problems with self-awareness. Because of a lack of language skills, interpersonal relationships with peers are often lacking. It has been suggested by investigators that deaf children are approximately 10 to 15% more delayed in social maturity than their non-handicapped peers. Likewise development of emotional stability will be delayed if a child is deaf from early childhood. The crucial period of adjustment is adolescence. The expression of intense emotions in socially acceptable ways is difficult when speech in inadequate.

Therefore, one of the primary purposes of physical education for the hearing impaired in an integrated environment should be that of socialization. The physical educator should determine which motor activities require the least verbal communication for success and in which activities the child will be afforded the opportunity to be recognized as a viable group member.

Depending upon the severity and the time of onset most deaf and hard of hearing individuals exhibit difficulties in balance, in locomotor coordination, and in speed or response to stimuli and problems in body mechanics. There is general agreement that they progress at the same rate developmentally as normal children with respect to locomotor patterns. Likewise, their physical fitness levels approximate that of the normal hearing child. There is a lack of research in the area of motor development abilities with respect to deaf and partially hearing.

Indications of Auditory Impairment in School Environment

The great majority of hearing impaired children are identified in the early childhood years. However, some children possessing milder hearing problems have not been properly identified. Therefore, it would be of benefit to the physical educator to be aware of some typical signs displayed by a hearing impaired child. A teacher should become concerned when he/she recognizes a delay in language ability and speech patterns; a reluctance to participate in activities; disciplinary problems and inappropriate response to oral directions.

Teaching Techniques to be Included in the Physical Education Program

The physical educator who works with the hearing impaired should provide appropriate means of communication. This may be in the form of lip reading, gestures and signs or a combination of both. The child with hearing loss will already have established a means of communication, therefore it is of prime important to reinforce this behavior. Incorporate the use of the "buddy system" when structuring class activities. The use of additional modes of sensory stimulation when teaching is a major benefit, e.g., visual, kinesthetic and tactile. These may be in the form of demonstrations, films, slides, and manual assistance by the instructor through the desired motor act. Hearing impaired children respond well to music and rhythmical activities. When presenting motor activities to the class, be sure to always position yourself where the child can see you. Do not speak nor give directions while writing on the blackboard or facing away from the child. Furthermore, do not raise your voice when speaking to a child with a hearing aid. When explaining or giving directions, be sure to have the child's attention. At the beginning of each activity, the teacher should develop communication cues or signals. Cues such as a raised hand, blinking light, foot stamping and bell ringing are but a few suggestions.

Assessment and Evaluation

Before a hearing impaired child is functionally placed in the regular school environment, the child must be thoroughly and completely evaluated. Each child should be assessed with respect to physical fitness, motor ability and perceptual development. The following are two assessment instruments:

1. *A Perceptual Test Battery* is designed to measure auditory and visual perceptual processing of children five through eight years of age.

2. *Kindergarten Auditory Screening Test* identifies children with auditory perception problems.

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EMOTIONALLY DISTURBED*

Emotional Disturbances in children can range from mild, sporatic reactions to severe and chronic maladapted behavior. Although intellectual deficits, i.e., mental retardation and emotional maladjustments are clearly not related to one another, there does seem to be a higher incidence of emotional disturbance found with intellectually impaired children. In all likelihood, of the special population students to whom you will be providing physical education services, the emotionally disturbed present the most frustrating problems and greatest challenge to your teaching and programming abilities.

A child with some form of deviant social behavior is the broad label used to describe emotional disturbance. This behavior results from forces within the child or their environment which can be affected positively or negatively through interaction with the latter. The environmental component is of prime significance to physical educators in their attempt to redirect the child's maladapted behavior in a positive manner.

The physical education program often provides a catharsis for the child who is unable to understand the consequences of their behavior. In establishing the program for these children, it is essential that the instructional environment be highly structured, emphasizing the need to observe rules and regulations of specific activities while being provided with appropriate reinforcement as their behavior moves toward acceptable limits.

Common Characteristics of Emotionally Disturbed

Psychometric tests which include intelligence, language and personality tests are used to identify and diagnose the emotionally disturbed child. However, sustained clinical observation in the learning environment may be the best means of identification. These children function differently in different environments.

Approximately two percent (2%) of school age population require special education services because of an emotional disturbance. Emotionally disturbed children are defined as having a variety of excessive, chronic, deviant behaviors ranging from impulsive and aggressive to depressive and withdrawn. Depending upon the type of disorder, emotionally disturbed children will exhibit anxiety, fears, aggressive hostility, withdrawal, short attention spans, distractibility, a lack of general discipline, frustration, and a poor self-image. The basic needs of the emotionally disturbed child are affection, acceptance, recognition, security, independence, self-direction and patience. Biological, psychological and environmental factors have caused emotional disturbances in children.

Two specific problems associated with emotionally disturbed children are schizophrenia (split personality) and autism. *Schizophrenia* is a term used with older children and adults and is characterized by delusions, hallucinations, and imappropriate motor responses, e.g., ritualistic motor behavior, unusual body positions, poor body image, posture and low fitness. *Autism* is a condition where an individual is almost totally withdrawn as if isolated in an infantile state. Behavioral characteristics exhibited include withdrawal, inability to communicate, and repetitive *"self-stimulating"* movements such as head rolling, rocking and banging.

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The use of behavior modification in physical education is plausible. Operant conditioning is the result of B. F. Skinner's work in which the teacher is able to *"operate"* or manipulate the environment. The use of operant conditioning techniques to change behavior include the following steps. (1) identify the behavior that is now exhibited, (2) identify the appropriate behavior, (3) structure the instructional environment and timing for the appropriate behavior to be exhibited, (4) reinforce behavior that approaches the appropriate.

Suggested Teaching Methodology for Physical Education

1. Provide immediate and frequent reinforcement through verbal and/or tangible rewards.
2. Use yourself and other students as models for appropriate behavior.
3. Exhibit enthusiasm.
4. Provide a high degree of structure to the instructional environment.
5. Begin activities immediately.
6. Use demonstrations and visual aids to facilitate instruction.
7. Facilitate fair play and courtesy within the activity program.
8. Your standards for behavior should be firm and fair, but most of all consistent.
9. Know the rules governing each activity.
10. Do not change the rules in the middle of the activity.
11. Provide activities where the child can experience success from time to time.
12. Provide short and simple directions; use eye contact.
13. Administer punishment only when a child's actions are extremely dangerous to that child or other children.

Suggested Activity Areas

1. Fundamental movement patterns and skills to enhance body image, gross and fine motor development, and perceptual-motor skills.
2. Rhythmic activities to enhance locomotor skill, creativity and general body coordination.
3. Physical Fitness activities to enhance strength, flexibility, endurance and agility.
4. Sports and Games to enhance development of fundamental movements and motor skills, minimum level of fitness and appropriate social skills.

Assessment and Evaluation

Several assessment instruments that can be used to identify and diagnose the emotionally disturbed child are described on the following page.

1. *Individual Motor Achievement Guided Education* (IMAGE) is an instrument designed for children between four and ten years of age and measures the following components: sequential motor activity, fine motor ability, static balance and perceptual-motor activity.

2. *Oseretsky Tests of Motor Proficiency* measures the components of static coordination, dynamic manual coordination of hands, general dynamic coordination, motor speed and simultaneous movement. It is scored on a pass-fail basis.

3. *Early Detection Inventory* (EDI) is designed for use with children in the pre-school, kindergarten and first grade. Its components consist of social-emotional behavior responses, school readiness tasks, motor performance, physical information, family and social history and medical history.

4. *The Basic Concept Inventory* is designed for use with children from the pre-school level through third grade. Components include identification of constructs used in verbal directions, ability to perform specific acts and repeat numbers in sequence, and repetition of statements with an ability to answer questions correctly.

5. *Hughes Basic Gross Motor Assessment* is designed for use with children from six to twelve years of age and its components consist of static balance, dynamic balance, gross motor coordination, fundamental movement, and eye-hand coordination.

6. *Basic Motor Fitness Test* contains two levels of components and is designed to be used specifically with the mentally retarded and emotionally disturbed child.

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SPINAL DEVIATIONS

Spinal deformity most often develops in adolescence. Generally speaking, this is a disease-free period and the complacency regarding routine medical screening can lead to serious problems. Furthermore, many youngsters do not get routine physical examinations. Even when they do have an examination, their spines are not usually checked properly.

Recently there has been a growing movement toward routine school screening examination of children in the sensitive age group for spinal deformity. Ordinarily children aged 10 to 13 should be screened on a yearly basis by specially trained school personnel. When abnormalities are detected or confirmed, then the child should be referred to the parents and the family physician. An important aspect of a successful posture screening program is the public relations that is maintained between the parents and the medical community.

These areas of neglect in health care have resulted in a large number of children with serious spinal deformities that need not have happened. Good treatment is now available for almost any type of spinal deformity, but, as always, *prevention is better than correction.*

The three basic spinal deformities are *scoliosis, kyphosis* and *lordosis.*

SCOLIOSIS

Scoliosis is a lateral deviation of the vertebrae from the medium line of the body accompanied by a rotation of the spine. Rotational deformities are meaningful because a true scoliosis cannot develp without rotation, thus rotation and scoliosis become virtually synonymous. Scoliosis occurring without rotation usually are mild, postural and of little significance.

Most cases of scoliosis are of *idiopathic* (unknown) origin and account for 80% of all spinal deformities seen in the average scoliosis clinic. The second most common cause of scoliosis is due to primary bony abnormalities of *congenital* origin. The third most common cause is *neuromuscular* problems. Anything that produces either asymmetric or symmetric muscle weakness in a growing child usually will result in spinal deformity. Examples of neuromuscular problems are poliomyelitis, cerebral palsy, and muscular dystrophy.

Structural curves usually increase during the adolescent growth spurt and occurs in females more than males. Four in 1,000 girls and about three in 10,000 boys in the 9 to 15-year old age bracket are affected by scoliosis. In true cases, the tendency is for the curvature to become progressively worse until the bony growth is completed and all the epiphyses fused. In the untreated cases, this leads to respiratory embarrassment, shortness of stature and visible deformity of the chest. These abnormalities can be eliminated or minimized by early treatment.

Since there are rarely any symptoms, *detection is through observation.* If all children in this age group were being seen by physicians, early detection could be accomplished. However, this does not occur. Screening is important for this reason. School screening programs such as those in Delaware, Massachusetts, California, and Minnesota have revealed a much higher incidence of scoliosis than previously realized.

Scoliosis screening should be a scheduled part of a school's health screening program. The physical education teacher may be part of the trained team of school personnel that conducts the regularly scheduled screening. However, if not part of the health services team the physical educator should be observant for possible spinal deviations during exercises, showering and dressing and at other appropriate times. If a student is observed whose spinal curvature warrants closer examination, then the physical educator should refer the student to the appropriate member of the school staff.

During screening, the student's entire back must be exposed to observation. For boys, removal of the shirt and undershirt is sufficient. Girls may wear a pullover top that can be pulled to the neck, exposing the back, in the forward bend position. No slip or undershirt should be worn.

The examiner should view the students in two positions: a normal upright stance and the Adam's position. To assume the *forward bend position*, the pupil bends forward from the hips. The back is rounded and the arms and head relaxed. The arms should hang down loosely as if to touch the toes. The examiner should view from both the front and the back, looking for a rib hump or prominence in the thoracic and lumbar area. In this, the forward-bending test, one can readily observe small differences in the rotational dimensions of the thorax. Oridinarily, the two sides will be absolutely symmetrical. Deviations from these normally symmetrical contours indicate a probable spinal deformity.

When the student is in an upright position, the back should be checked for higher shoulder, priminent scapula, high pelvis and angle or space between the arm and the body. Viewing from the side, the examiner should check for kyphosis and lordosis, bearing in mind that different degrees of lordosis are considered normal for different age groups. Finally, the examiner should check for high shoulder and prominence of ribs on one side when viewing the student from the front.

Students with suspected scoliosis should be rechecked by the school nurse or regional physical therapist from the Pennsylvania Department of Health. All students with suspected scoliosis should be *referred to a physician*. Effort should be made to avoid alarming these students and their parents. Take time to explain soliosis, answer questions and allay any fears.

The school medical staff should coordinate the screening program and establish record keeping on the screening. Two forms can be used. One is sent to the parents announcing the screening and explaining how the student should dress for it. The second form is addressed to the parents and physician of a student who shows a possible scoliosis, stating what was observed and that the physician may check the findings and determine if treatment is indicated. This form has a space at the bottom for the physician's comments and should become part of the student's permanent health record after being returned to the school nurse.

Parents who do not respond to the referral need to be encouraged to have their child examined by a personal physician or at a state health clinic.

Essentially, medical treatment for scoliosis includes: 1) serial observation, 2) Milwaukee brace, and 3) surgery. Exercises alone are not a method of management for structural spinal deformity, but are most appropriate for postural problems. The responsibility of the school physical education program in cases of scoliosis is to modify activities as indicated by a physician and provide time, space and encouragement for students with prescribed exercises.

Suggested exercises for mild cases of scoliosis (functional) may include the following:

1. Active hanging, horizontal bar/overhead ladder.

2. Feet apart, side bend, one arm at side, other hip, push down hard, against curve (convex side).

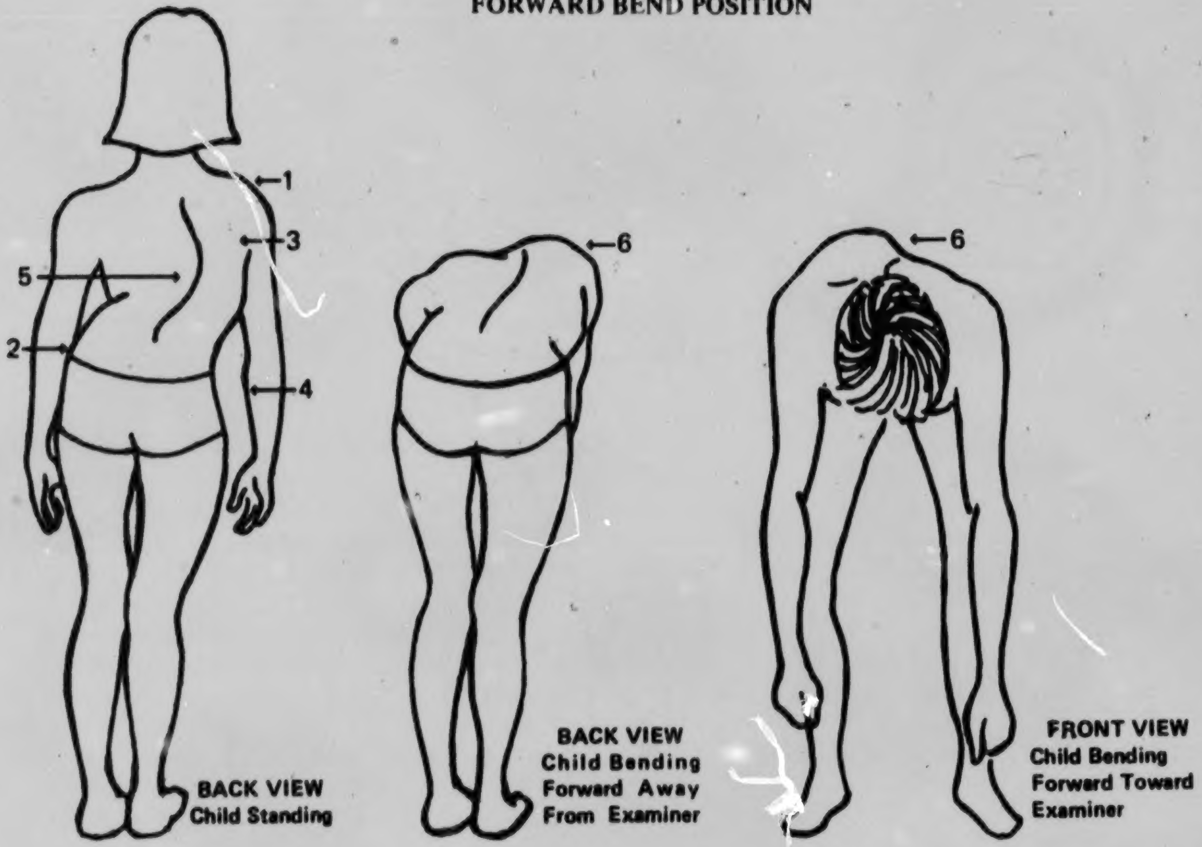
3. Stall bar stretching - facing bar, one arm outstretched grasping bar - raising other arm above head and stretch.

4. Describe small circules hanging from rings, horizontal ladder or bar, toes pointed.

5. Swing from side to side, toes pointed, knee together on rings, horizontal ladder or bar.

6. Lie on floor with knees drawn up to chest, bend forward from hips until back is flat, hands on hips.

FORWARD BEND POSITION



BACK VIEW
Child Standing

BACK VIEW
Child Bending Forward Away From Examiner

FRONT VIEW
Child Bending Forward Toward Examiner

The forward bend position is used when screening pupils for scoliosis.

To assume the forward bend position, the pupil bends forward from the hips. The back is rounded and the arms and head relaxed.

The curve and the rotation of the vertebrae may be more obvious when the pupil is in the forward bend position. When viewing the back of the pupil in this position, the teacher should stand behind the pupil and then in front of him.

A prominence, caused by a rotation of the vertebrae and usually on the convexity of the curve, indicates a structural curve.

The curve will tend to disappear in the forward bend position if no structural changes have taken place.

KYPHOSIS

Kyphosis is an exaggeration of the posterior curve of the thoracic spine. This spinal deviation may have many causes have many causes and may be accompanied by cervical and lumbar lordosis. The most common cause is poor posture, although fatigue, nutrition, occupation and tight thoracic musculature are contributing factors.

Postural kyphosis can be readily corrected by having the child stand, straighten the back, pull in the stomach and pull back the shoulder blades. The ability of the child to do this easily in the standing position almost always indicates a postural problem alone and not a spinal deformity. Kyphosis caused by posture can be further confirmed or ruled out by having the child lie prone on an examining table. Persistent kyphosis with the child in the prone position indicates some structural deformity.

Another check for structural kyphosis is to have the child hyperextend the spine while in the prone (face down position.) Have the child put his/her hands behind the buttocks and lift the head and shoulders as well as the legs so that the child is rocking on the stomach area. Presence of a persisting kyphosis on this prone hyperextension test is even more convincing evidence of structural kyphosis.

The overall objective of a posture program in kyphosis cases is to remove the cause of the deviation; produce the normal length of the adducters and internal rotators of the arms; and increase the suppleness of the shoulder girdle.

Refer to the "*Posture Assessment Checklist*" at the end of this section for details regarding anatomical points of reference using the grid screen.

The following exercises have proven to be useful in correcting kyphosis problems. Caution should be used to avoid exercises that permit forward flextion of the shoulders and neck.

1. Have the student stand with feet slightly apart, fists clenched with crossed arms in front. The students should fling both arms upward and backward behind the head. The student should raise up on toes as the arms are flung backward.

2. Have the student raise arms with the palms up until they are parallel to the floor. The student should move the arms with moderate speed so the hands move in small circles backward, downward, forward and upward.

3. Have the student raise the elbows to shoulder level, clasp hands and pull so that each arm resists the other.

4. Have the student lie on his/her back with both feet flat on the floor with hands at sides and palms up. Ask the student to move the arms horizontally until both hands are overhead; return to original position and repeat. Keep back straight.

5. While standing on the floor and grasping the rings have the student dip-bend the right knee to stretch the pectoral muscles. Make sure the body is in proper alignment and raise the left leg sufficiently high. Change legs.

6. Have the student lie in a prone position, lock hands behind the back and raise head and shoulders. This should be repeated several times per day.

7. Have the student lie supine on a bench with knees bent, feet on the floor and a light weight

dumbbell in each hand. Extend arms sideward, allowing the weight of the dumbbells to stretch chest muscles.

8. Have the student lower his/her chest below parallel abrs from a front support position to stretch anterior thoracic tissue. Make sure you lower the chest sufficiently. Do not allow legs to touch or rest on the floor. Use low parallel bars (Dips).

9. With hands well spread have the student grasp a wand and raise the hands over head. The wand is moved back over the head as far as possible while keeping the arms straight.

10. Have the student lie supine on a mat with a pad under the shoulders and fingers laced behind the neck. A helper kneels at the head and presses elbow gently and slowly downward.

11. Have the student stand with arms at sides and move shoulders in backward circles by first shrugging them and then pulling them backward and dropping them to original position.

12. Have the student hang on a horizontal bar or rings.

13. Have the student perform a skin the-cat-maneuver on the rings.

LORODOSIS

Lordosis is an exaggeration of the lumbar spine usually accompained by a forward-downward tilt of the pelvis and characterized by a protruding abdomen. The most common cause is poor posture; contributing factors are a tight ilio psoas muscle, weak abdominal, gluteal and hamstring muscles.

Assessment of the child with suspected lordosis problems includes viewing the child in the usual forward-bending position with the knees straight; in this position, one can see whether the lumbar lordosis is corrected. Excellent use of the grid screen is very effective in determining lordosis problems. Refer to the *"Posture Assessment Checklist"* for anatomical reference points.

The objectives of an effective exercise program for lordosis cases include the following: 1) to increase the flexibility of the back extensor muscles in the lumbar area of the spine; 2) to increase the flexibility of the back extensors, the hamstring, the gastrocnemius and soleus muscles; 3) increase the strength of the abdominal muscles, and 4) to attain the correct position of the pelvis.

The following exercises have been sucessfully used to improve or correct lordosis problems:

1. Have the student stand with feet spread and have him/her bend forward at the hips. The knees should be straight with arms hanging between the legs.

2. Have the student tilt the pelvis forward and rotate the hips in a counter clockwise and then in a clockwise position.

3. Lying in a supine position ask the student to force the small of the back to the floor by rotating the lower part of pelvis forward.

4. Have the student lie on his/her back and contract abdominal muscles so that the lumbar region is pressed to the floor (break imaginary eggs with low back).

5. From a sitting position have the student keep the knees straight, feet apart and reach to grab ankles.

6. Have the student raise his/her knees to chest while in a supine position.

7. While on hands and knees have the student tuck pelvic area inward to flatten his/her back. Have him/her hold for five seconds and return to original position.

8. While in a prone position, have the student extend the arms to his/her sides with palms up and at the same time raise his/her head and shoulders. At the same time have him/her forcibly contract abdominal muscles.

9. Have the student assume a supine position, grab both knees and pull them to his/her chest. The student should them rock to a sitting position while still grasping both knees. Repeat (roll ups).

10. Individual knee pulls are done from a supine position. Have the student grasp one leg just below the knee and pull it to his/her chest; alternate other leg - pull knee tight to chest.

11. Have the student assume a supine position with both feet over the head. The knees should be straight with knees even with eyes and hands at side for balance. The student should try to touch toes to floor over top of his/her head.

12. Bicycle - alternate legs in and out, bending knees in a cycling action - not overhead, use hands for balance.

13. Have the student do bent knee sit-ups for 30 seconds with hands laced behind his/her head.

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ORTHOPEDICALLY IMPAIRED*

The orthopedically impaired or physically handicapped child has to be considered a paradox within the area of physical education. The fact is that this is the most misunderstood and underestimated category of the handicapped pertinent to their physical limitations. Most of the children falling within the orthopedically impaired category have performance limiting disabilities, but they are not of a performance inhibiting nature. As a matter of fact, the majority of the children within this classification are more typical than they are atypical, and as a consequence, their function is significantly greater than what would be normally expected. It may come as a surprise to learn that in most cases, only minor modifications in the rules, regulations, or equipment, that is typically utilized in our physical education programs, would provide the opportunity for the majority of physically handicapped children to participate effectively.

Every physical educator who is experienced in teaching the physically handicapped or orthopedically impaired child seems to find that their estimates of that child's limites of performance are lower than the actual level achieved. Never underestimate the performance potential of the orthopedically impaired or physically handicapped child. You must recognize that activities need not be designed specifically as *"handicapped"* skills but rather make appropriate adaptations and modifications that will allow the program to conform to the needs of the child as opposed to having the child conform to the needs of the program.

COMMON ORTHOPEDIC DYSFUNCTIONS

Cerebral Palsy is a general term applied to a group of permanently disabling symptoms resulting from damage to the developing brain that may occur before, during or shortly after birth. It results in loss or impairment of control of voluntary muscles.

There are many causes of cerebral palsy. Before birth, the brain may not develop as well as it should because of a lack of oxygen, hemorrhage, infection, disease or drug toxicity. At birth, difficulty in delivery may damage the brain, e.g., breech, forcepts and cesarian deliveries, or a lack of oxygen. After birth, bleeding into the brain may destroy cells; infection and injury may harm a control area and produce symptoms.

The spastic type is the most common (50-60%) of the total population afflicted. The spastic child is characterized by an imbalance of muscle tone, lack of muscle control, stiff and jerky movements. The posture of spastic children is characteristic; the legs turn in, bending at the hips and knees, heels are off the ground; the arms are bent at elbows and wrists, while the fingers are clenched. The athetoid child, approximately 30% of afflicted population, lacks the ability to perform purposeful movements, has a tendency toward developing postural and orthopedic deformities, and is further characterized by facial grimacing, drooling and difficulty in eating and speaking. The ataxia form makes up about 8% of the total. This type of condition is marked by poor balance, loss of muscle coordination and trouble with skillful acts such as writing and throwing a ball.

Muscular Dystrophy includes several forms of muscular disease characterized by progressive degeneration and muscle wasting. The cause is genetic and the nature of the disease is such that the muscle fiber protein is destroyed and replaced by adipose and other connective tissues. The most prevalent form is Duchenne or Progressive Muscular Dystrophy which afflicts young children between the ages of 3 to 10. Its characteristics include a developmental delay in walking, difficulty in rising from seated position, running and climbing stairs and a marked lordosis condition.

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Juvenile Rheumatoid Arthritis, knowns a "Still's Disease" is a chronic inflammation of joint and connective tissue. It is characterized by swollen joints, restricted range of motion, muscle spasm, tenderness, redness and high fever. The cause is unknown and the age range of onset is usually 5 to 10 years. The most common of the joints affectes is the knee.

Spinal Cord Injuries comprise another common orthopedic dysfunction that results from congenital problems or are acquired from physical trauma, disease and athletic injuries. The level and location of the spinal cord injury determines the severity of the disability. Paraplegia is partial or complete paralysis of both legs and the lower trunk as a result of damage to the spinal cord at the thoracic or lumbar levels. Quadraplegia is partial or complete paralysis of all four limbs and the trunk and is caused by damage to the spinal cord at the lower cervical level.

Osteochondritis is a severe inflammation of the articular cartilage and bone around a given joint. The probable cause is trauma, infection, endocrine, metabolic and circulatory disorder.

Osgood-Schlatter Disease is a partial separation of the tibial tubercle from the proximal tibia with accompanying inflammation of the articular cartilage. Physical trauma is the probable cause of this condition, and is characterized by an enlarged and reddened tibial tubercle and extreme tenderness and pain when extending the knee joint.

ADAPTING THE INSTRUCTION ENVIRONMENT

Physical facilities should be barrier-free, especially for wheelchair-bound individuals entrances and exists should be accessible; rams or elevators available and railings installed in hallways, locker rooms and toilet facilities. Desk and chairs can be modified, and proper coverings applied to slippery floors.

Modified equipment for instructional purposes may be purchased for the orthopedically handicapped or it can be *"homemade"*. Some suggestions for modifying the equipment consists of using lighter objects such as balls and striking implements and increasing the size of equipment such as bats, paddles, and balls.

Rules and regulations of games and activities can be modified by decreasing the duration of activities, shorten the distances, enlarge the targets. In general, modify rules and regulations for large and small group activities so that a student experiences some *success* periodically.

PROGRAMMING CONSIDERATIONS IN PHYSICAL EDUCATION

In developing programs for the orthopedically impaired, it is important to consider the following: (1) obtain physician's approval of the program (2) integrate into least restrictive environment (3) provide activities in which the child can experience *success*. For the *cerebral palsied* child, provide activities that will enhance perceptual motor control, balance and psychosocial development. When programming for *muscular dystrophy*, provide activities that will enhance level of physical fitness, especially muscle strength and flexibility. The child who is afflicted with *"Still's" disease* should be given activities and exercises which will increase the range of motion. Also, do not incorporate activities which impose stress and strain on involved joints and provide a sufficient amount of rest periods. Physical education programs designed for individuals with *spinal cord injuries* should provide activities that will promote upper body strength and endurance and enhance body image and psycho-social development. Modify the activities according to the type and severity of the impairment, i.e., ambulatory as opposed to wheelchair bound. Children afflicted with *osteochondritis or Osgood-Schlatter* disease should be provided with non-strenuous activities and activities to maintain the range of motion about the afflicted joint during the healing process.

ASSESSMENT AND EVALUATION

There is a lack of normative based assessment instruments because of a wide variation in degree and types of orthopedic impairments. The physical education instructor should make use of clinical observation for the purpose of identifying deficits in motor deficiency and analyzing inappropriate motor behaviors. If task-specific assessment tools are available, they should be used also.

The Physical Ability Rating Scale is designed for children between birth and seventy-two (72) months and consists of 230 test items measuring components such as copying, drawing, jumping, hopping, skipping, balancing, throwing, climbing, running and galloping to name a few. Norms are available and the test results may provide information for development of a battery of items for the orthopedically impaired.

The Early Detective Inventory (EDI) measures components consisting of social-emotional behavior, school readiness tasks, motor performance, physical characteristics, family, social and medical history. It identifies children with social, emotional and physical problems and is designed for children from nursery school to first grade.

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VISUALLY HANDICAPPED*

Although integration (mainstreaming) of handicapped children in various categories is a realtively recent movement, children with visual impairments have been mainstreamed into regular classrooms for more than half a century. Early professionals recognized that children with visual impairments could be educated with their sighted peers with only minor modifications.

In physical education, teaching techniques and some materials are modified so as to allow the child to acquire motor skills through sensory channels other than vision. This sensory or perceptual motor approach to physical education programming has proved to be highly effective in the development of the motor and behavioral characteristics of the visually impaired child. The principle objective of programming is to reorient the instructional modalities so as to place greater emphasis on all of the intact sensory modalities and to de-emphasize the need for use of the impaired visual modality.

As with all handicapped children, there is an impending need for provision of a full range, or continuum of services in physical education for children with visual impairments. Naturally, blanket programming cannot assure that *each* child will receive an appropriate education, therefore, the program must be developed on an individual basis.

As physical educators, providing services to the visually impaired, it is our responsibility to facilitate the *learning by doing* process. Whenever possible we must allow the visually impaired child to actually experience *"doing it"* rather than just providing a verbal explanation of what is to be done.

DEFINITIONS

Visual handicaps are defined in terms of visual acuity as measured by the Snellen Chart. The lines of progressively smaller letters are read by a person sitting or standing at a distance of twenty feet from the chart. For example, 20/30 vision means that the eye can see at a distance of 20 feet what a normal eye can see at 30 feet.

Legal blindness refers to the ability of an individual to see at 20 feet what a noramlly-sighted person can see at 200 feet, or a field of vision less than 20 degrees. *Travel vision* refers to the ability to see at five to ten feet what a person with normal vision can see at 200 feet. *Motion perception* refers to the ability to see at three to five feet what a person with normal vision can see at 200 feet. *Light perception* refers to the ability to perceive bright light at a distance of three feet or less. *Total blindness* refers to the inability of the individual to perceive an intense light centered directly on the eye.

PREVALENCE

According to statistics gathered by the American Foundation for the Blind, approximately 6.4 million people in the United States are afflicted with some form of visual impairment. Of this number, 1.7 million are either *"legally blind"* or function at *"legal blind"* limits. It is estimated that approximately 60,500 children between the ages of five and nineteen years have some form of visual impairment, or one out of every 1,000 school-age children.

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CAUSES OF VISUAL IMPAIRMENT

The time of onset and the degree of visual impairment plays a major role in the individual's ability to achieve ultimate educational potential. Visual handicaps may be either congenital (from birth) in nature or acquired as a result of disease or trauma.

There are a number of underlying causes of visual handicaps. The causes and prevalence consists of: (1) prenatal influences (41.8%), (2) poisoning (19.3%), (3) heredity (14.3%), (4) infectious diseases (7.4%), (5) tumors (5%), (6) injuries (4.9%) and (7) other unidentifiable causes account for 8.2%.

BEHAVIORAL CHARACTERISTICS

No two visually handicapped children will exhibit the same behavioral characteristics. The visually handicapped classification must be recognized as being heterogeneously grouped, the range may be from total blindness to minimal loss of vision.

With respect to the cognitive processes, the concept development of the congenitally blind may be restricted due to the lack of visual reinforcement. The totally blind child relies solely on other senses to gain information about the environment. Some authorities believe that children with severe visual handicaps have difficulty in abstract thinking. Of interest to the physical educator is the fact that space perception of the totally blind is restricted as compared to sighted children, so sound stimuli may be used effectively to teach space perception.

Visually impaired children often exhibit problems in personal and social adjustment, and the physical educator is in an excellent position to assist these children in developing a positive self-image.

Some atypical mannerisms that are characteristically observed in the blind child include the following: 1) rocking back and forth (a form of self-stimulation), 2) putting fists or fingers into the eyes, 3) waving fingers in front of the face, 4) whirling rapidly round and round, and 5) reciprical movement of the head forward and backward. All of the atypical behavior can be overcome by means of appropriate motor activities that inhibit the need for self-stimulating behavior.

MOTOR CHARACTERISTICS

One of the greatest problems caused by a visual handicap is the difficulty in moving about in one's environment. Success in school and at work in later years depends on mobility. According to a number of authorities, as the visually handicapped increase in age, the motor performance differences between them and their sighted counterparts diminish. The visually handicapped progress developmentally in quite a normal fashion.

Extreme variations in motor performance are displayed by the visually handicapped. Physical fitness levels are commonly low due to a lack of opportunities to become fit and because there is a tendency toward obesity among the visually handicapped. The blind have problems with motor skills which requires running, throwing and dynamic balance. It has been commonly accepted that the visually handicapped possess a poor body image, postural problems and poor head control. This is due to the inability of the handicapped child to emulate and receive visual feedback concerning specific postural positions.

SUGGESTED TEACHING METHODS

Some common sense suggestions when providing instruction in physical education include the following: 1) always address the individual by name, 2) remove hazardous objects from the gym floor, 3) acquaint the student with the physical surroundings of the gymnasium and school grounds, 4) do not purposely avoid the word *"see"*, 5) always speak to the blind child when they enter a room, otherwise they are often unable to perceive whether anyone is present, 6) do not show pity or patronize the blind child, 7) you may *guide* the individual to different locations by having the child *take your arm*, but preferably they should be instructed in the environmental locations so they are as independent as possible.

You should make it a point to learn the child's name and other vital information as soon as possible. When selecting activity experiences, consider the degree of the impairment, and be aware of the cause of the visual impairment. For children possessing residual eyesight, help minimize the degree of strain that may be placed on the remaining vision by providing an adequate amount of lighting, large visual cues and frequent periods of rest. Make use of partners (the *"buddy system"*) when performing individual, dual or small group activities. In your instructions, emphasize verbal communication, incorporating clear and concise descriptions. The instructor should provide information in Braille or very large print to enable the blind or visually impaired to understand what is being taught. Finally, the physical educator must be able to adapt equipment and incorporate instructional aids to meet the child's needs. Such examples include: 1) oversized equipment with bright colors, 2) audible balls and goals, 3) guide wires and the limitation of play areas.

SUGGESTED ACTIVITY AREAS

It is suggested that a sound physical education program for the visually handicapped incorporate *perceptual-motor and sensory development activities* which include components of body image, spatial and kinesthetic awareness, tactile and auditory discrimination, and equilibrium training. *Motor ability* components should include body mechanics and posture, fundamental movement patterns, motor skills and leisure time activities. *Physical fitness* should include the components of endurance, strength and agility.

ASSESSMENT

When a visually handicapped child enters school at the beginning of the year, the physical educator needs to obtain information on his physical capabilities including overall motor proficiency and physical fitness level. The purpose of administering these initial assessment instruments is to provide a basis for the development and implementation of the child's I.E.P.; to record progress and developmental gains; and to determine present level of child's performance. The final assessment assists in determining the effectiveness of the instructional methodology used as well as to utilize the data obtained to plan further programs for the child.

Suggested assessment instruments include the following:

1. Motor-free Visual Perception Test (MVPT)
2. 3-D Test of Visualization Skill
3. Developmental Test of Visual-Motor Integration
4. Frostig Developmental Test of Visual Perception
5. AAPHER Youth Fitness Test

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SPECIFIC LEARNING DISABILITIES*

A category of handicapping conditions referred to as learning disabilities has evolved very recently. Even though it is an emerging classification among handicapped children, in many school districts the learning disabled have become the largest single handicapped entity. Programs for the learning disabled were essentially non-existent until late in the 1960's and, therefore, the area did not achieve complete recognition nationwide until the mid 1970's. In the past, there has been some debate as to whether specific learning disabilities as a separate entity indeed existed, or whether a given child merely demonstrated learning problems due to another disability such as mental retardation. The consensus of educational opinion, as well as that of the United States Office of Education, is that learning disabilities are in and of themselves very real, and because of this, constitute learning impairments that *could not* be confounded with any other handicapping condition.

Generally speaking, children with learning disabilities exhibit varying disorders in the learning process which can be manifested as problems in reading, writing, arithmetic, talking, thinking, or listening, and often involve problems with language usage. Educational personnel have thus had to become familiar with new terminology describing specific learning dysfunctions such as dyslexia, aphasia, agnosia, minimal brain dysfunction, and other specific categories within the area. What should be apparent from the preceding is that a learning disability is not a discrete disorder, but instead, a complex of dysfunctions which may manifest themselves in different forms and to varying degrees within a given individual. It must be again noted that each sub-classification within the category is a discrete entity and not related in any way to other primary hadicapping conditions such as mental retardation, visual or hearing impairment, etc.

Of concern to physical education professionals are the characteristics of the learning disabled which have performance limiting effects on motor development and behavior. Many of the characteristics displayed by the learning disabled children are often hyperactive, exhibiting difficulties in maintaining attentiveness. In some cases, these children lack the ability to perform coordinated movements and simple acts such as throwing or catching a ball, and skipping or running, etc. Of principal concern is the fact that programs of instruction in physical education are related to the ability to understand rules, and to integrate cause and effect relationships during the performance of motor skills. Although a particular activity may serve to challenge the ability of a population of children at a given age, the learning disabled indivudual may not completely understand the purpose of the activity and therefore may become frustrated and choose not to participate.

The fact is that a learning disabled child who is given the opportunity to compensate for a specific problem must be provided with motor activity that facilitates sensory-motor development. The prime objective in developing instructional programs in physical education for children with specific learning disabilities must, therefore, be oriented towards the perceptual-motor process as opposed to merely providing the opportunity to engate in *"splintered"* or *"non-sequential"* motor activities. The category of learning disabled children is an instance where the type and nature of the programs we provide can surely have a significant impact in assuring that a child's optimum potential is achieved.

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DEFINITION AND SCOPE OF LEARNING DISABILITIES

The United States Office of Education, Bureau of Education for the Handicapped, advocates the following defintion for *"Learning Disability"*:

> Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmenal aphasias, etc. They do *not* include learning problems which are due primarily to visual, hearing or motor handicaps, due to mental retardation, emotional disturbance or to environmental disadvantage.

Essentially, specific learning disabilities stem from central nervous system dysfunctions, i.e., organic brain damage to the area of the cortex which govern the specific area of dysfunction.

CLASSIFICATIONS OF LEARNING DISABILITIES

The learning disabled child may exhibit a variety of conditions to different degrees of specific sensory processing difficulties. For purpose of clarification, these conditions are grouped according to sensory mechanisms.

1. *Deficits in Auditory Perception* refer to one's inability to recognize and discriminate among auditory stimuli and to interpret these stimuli by association with previous experiences. This includes deficits in auditory acuity, decoding, vocal association and memory.
2. *Deficits in Visual Perception* refer to one's inability to recognize and discriminate visual stimuli and to interpret these stimuli by association with previous experience. This includes deficits in visual acuity, coordination, form discrimination, memory.
3. *Deficits in Kinesthetic Perception* refer to one's inability to recognize and discriminate tactile and proprioceptive stimuli by association with previous experience. This category includes deficits in the development of laterality, directionality and body image.

BEHAVIORAL CHARACTERISTICS OF THE LEARNING DISABLED

One should realize that no two learning disabled children exhibit the same specific behavioral characteristics. However, in spite of this, they do display behavioral characteristics which are not exhibited by non-learning disabled children. These characteristics that seem to be most common are:

(1) *hyperactivity* - the inability to remain at rest. (2) *distractibility* -inability to focus attention on specific objects, tasks or individuals. (3) *dissociation* - inability to perceive events, activities and tasks as a whole. (4) *perseveration* - the inability to transfer from one activity to another, constant repetition of same activity. In general, their motor performance tends to be clumsy and inconsistent. This behavior results from the inability to process and interpret various types of sensory information that is necessary for motor acquisition. Furthermore, most of these children exhibit impulsive behavior which accentuates the need for a highly structured instructional environment.

Deficits in Motor Performance

A large number of learning disabled children lag so far behind in acceptable standard of behavior that corrections for deficits are necessary before other more refined skills can be developed. Frequently, learning disabled children have particularly serious problems with the development of *body image, balance, bilateral coordination* and *eye-hand coordination.*

Suggested Teaching Methodology

Because of the unique behavioral characteristics exhibited by the learning disabled child, physical education class periods must be highly structured. The principle of structure requires the establishment of a routine which is repeated day after day and leaves no element uncontrolled. Make use of activity stations in which small groups or individuals may perform. Authorities agree that background noises which distract children should be eliminated. The child who is hyperactive should be scheduled only for indoor physical education where environmental variables can be more easily manipulated and controlled.

Clear and concise directions should be given when explaining new activities. Once the directions have been given, it is beneficial to ask the students to repeat them. Orient the instruction toward the child's strength, and provide individualized instruction whenever possible. Structure the instructional environment so that students may experience success periodically.

Assessment and Evaluation

Physical educators should be familiar with valid, contemporary assessment instruments. The learning disabled child should be assessed initially using a standardized assessment tool to determine the present level of motor functioning. Specific assessment instruments available include the following:

1. *Motor-Free Visual Perception Test* (MVPT) is designed to measure spatial relationships, visual discrimination, figure-ground, visual closure and visual memory. It is a 36-item multiple choice test that can be administered to children between the ages of five and seven in less than ten minutes.

2. *Developmental Test of Visual-Motor Integration* (VMI) is designed to measure a child's ability to imitate drawings of various forms - visual motor integration. Norms are provided for children between the ages of two and fifteen.

3. *The Purdue Perceptual-Motor Survey* measures the components of balance and posture, body image and differentiation, perceptual-motor match, ocular control and form perception. It is not a test but a survey for behavior screening.

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NUTRITIONALLY-BASED PROBLEMS

In no other country in the world is the problem of obesity as serious as it is in the United States. According to recent statistics compiled by the Metropolitan Life Insurance Company, 35% of all American men and 40% of all American women, who are 40 years of age and older, are at least 20% overweight. It is estimated that about 10 million American teenagers are overweight. A smaller percentage are underwight. And while severe instances of malnutrition are rare, a significant number of children are anemic.

These are all nutritionally-based problems with serious health implications for children. It is important that physical education and health specialists address themselves to these problems in two ways: 1) by using assessment procedures to detect and identify students with problems; 2) by developing instructional programs to correct or alleviate the problem.

Obesity can be defined several ways. The term generally refers to a weight more than 25% over the ideal weight, while 10 to 20% over normal is simply considered overweight. Up to 10% over normal weight may have no significance for a child but higher weights can cause physical and psychological problems. Obesity also refers to an above average amount of fat present in the body. It is further defined as body fat in excess of 5% above the average for males and females between the ages of 17 and 50.

Obesity in children is a serious problem and may facilitate emergence of latent diabetes in predisposed individuals, add hazards to surgery, contributes to postural problems, and at the very least is responsible for a feeling of chronic fatigue and sluggishness.

The problem of obesity is magnified by the mass media which tends to distort proper weight control procedures. Dr. Thomas M. Vodola, who is the director of Project ACTIVE in Oakhurst, New Jersey points out the following misconceptions readily accepted regarding obesity.

Fact	Fallacy
1. Recent studies reveal lack of physical activity is the primary causative factor.	1. The prime cause of creeping obesity is increased caloric intake.
2. Only exercising to excess will increase one's appetite.	2. Increased physical activity increases one's appetite.
3. "Crash" Dieting frequently causes deficiencies of essential foods.	3. "Crash" dieting is the effective way to lose weight.
4. "Chubby" children if unattended will become chubby adults.	4. "Chubby" children will outgrow their tendency to be heavy.
5. Research studies indicate that restrictive dieting reduces weight rapidly, followed by a rapid increase of weight.	5. "Crash" dieting is the best means of losing or maintaining a proper weight control.
6. The obese tend to have emotional problems.	6. Obese individuals are well-adjusted and emotionally stable.

In addition, there are emotional consequences of obesity. In America, where slimness is equated with youth and attractiveness, obese children, adolescents especially, may suffer emotionally for their poor appearance. Overweight may be the result of a poor self-image but the reverse may also be true - self-confidence is harder to develop in an inefficient, uncomfortable and unsightly body.

The causes of overweight are legion but are primarily related to *underactivity* and overeating. It connotes a calorie intake in excess of body usage. In a small number of cases, the overweight child may have glandular, metabolic or emotional problems or inherited tendencies to overweight. However, the inherited susceptibility to obesity is very often related to a perpetuation of *family eathing patterns and activity patterns.*

In today's society of fast food restaurants and hectic schedules, many individuals, particularly children, are unable to understand the need for nutritional balance by themselves. It is interesting to note that a child may be obese and still remain malnourished.

Malnutrition is commonly described as insufficient substrate to meet the demands of a normal living routine. Common signs which the physical educator should be aware of are: 1) poor appetite; 2) a *"bony"* physical appearance; 3) low physical vitality; 4) hypotension and 5) poor coordination. Although malnutrition may be due to lack of knowledge (cultural deprivation), it usually is emotional in nature. In addition, it may result from organic problems, such as thyroid dysfunction. For children that you suspect are malnourished, proper school referral should be followed and above all, the physical educator and health specialist should stress proper balance in diet, rest and exercise to the student.

Although most of the severe forms of malnutrition-pellagra, beriberi, scurvy and rickets - are not frequently seen today in America; *anemia,* however is the exception. While the peak prevelance for iron deficiency is from ages one to two, United States adolescents show a rate of anemia of 11% for blacks and 4% for whites. The result is lethargic, fatigued children with a high susceptibility to infection.

Assessment Techniques

There are a number of assessment techniques which can be used to identify the overweight and underweight student. One of the simplest ways is by *periodic measurement of height and weight* and comparison of measurements with charts of ideal weights according to body type. This could be done in physical education class or as part of a general physical exam by the school medical staff.

Probably the most accurate method of determining obesity, which can easily be applied by the physical educator is the *skin-fold test.* The skin-fold test provides both a simple and accurate method of assessing the fat content of the body quantitatively. It is applied to locations on the body where a fold of skin and subcutaneous fat can be lited between the thumb and the forefinger, so that it can be held free of the muscular tissue and bony structure. The common sites that are measured include the abdomen and triceps. The calipers are applied to the abdomen approximately five centimeters to the right of the umbilicus. When measuring the triceps, the calipers should be applied halfway between the elbow and the shoulder. The test procedures include: 1) lift the skin with thumb and index finger; 2) apply calipers approximately one centimeter from the fingers; 3) maintain standard and consistent pressure before measurement, and 4) measure each skin fold three times.

Program Considerations in Physical Education

Across the country, physical educators, school nurses, and family physicians are working with obese and severely underweight boys and girls in junior and senior high schools to help them gain or lose weight according to individual need. Generally, these programs to overcome problems of obesity and underweight are based on teaching youngsters and their parents the importance of watching food intake, participating in sensible exercise programs, and achieving the self-respect to develop a positive self-image.

In most successful programs, teachers, school nurses and physicians communicate with parents of children they think should be in class to help them overcome weight problems. After initial contact by mail or phone, parents are usually invited to a meeting where the purposes of the program are explained. In many instances, parents participate in weekly discussions on nutrition, diet, and other factors involving weight control.

Involvement of the parents in changing a childs food habits is important but may be difficult as an overweidht child is likely to have parents with the same problem. Children of two obese parents have a 73% chance of being overweight; children who have one obese parent have a 50% chance of obesity; but only 9% of the children with no overweight parents will be obese.

Most school programs consist of lectures and discussions on weight control, reading pamphlets on the subject, viewing films, and vigorous exercise. In some programs, a full period one day a week is reserved for discussions; in others, five to ten minutes at the beginning of class is used.

While a variety of physical activity is possible, the most successful activities include the following: Royal Canadian Air Force routines, Cureton's continuous exercise routines, jogging and running, swimming, weight training, jump rope, gymnastics and individual and team sports. In addition to a change in diet, a program of physical activity, to include some of the above suggestions, should be designed for the overweight child. This program could be offered as an independent study; a supplement to regular phyical education; or as a part of a special activity group in class. The latter arrangement has the advantage of providing group support.

Some nutritionists have suggested that the best cure for obesity may be prevention through an exercise program for all school children. Greater emphasis should be given to the development of skills in sports that have distinct carry-over value in adult life.

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Pennsylvania Department of Education, **Teenage Dieting: Harmful or Helpful?** 333 Market Street, Harrisburg, PA 17126.

Pennsylvania State University, The; **Nutrition in a Changing World, College of Human Development**, University Park, PA 16802.

PHYSICAL FITNESS

Physical Fitness can be described as a state in which a person possesses those qualities which allow the individual to efficiently perform the activities of daily living–work and recreation–and still have reserve for emergencies. That is not a rigorous standard yet one of every six children in the United States is so weak, uncoordinated or generally inept that he or she is physically underdeveloped by the standards of the President's Council on Physical Fitness and Sports.

The underdeveloped child risks serious physical and emotional health hazards with a condition that could be corrected with a small investment of time and effort. Physical educators are in the best position to detect low physical fitness and to help remedy it. It is recommended that students be tested for fitness beginning in the fourth, fifth and sixth grades and continuing until graduation. Younger children can be informally screened through class activities that cannot be accomplished without basic fitness. Through observation, the teacher can spot children who tire quickly or lack strength to complete the activity.

Many different kinds of tests are available to measure fitness levels or you can create your own. *"Testing for Impaired, Disabled, and Handicapped Individuals" reviews 19 such tests and provides a comparative analysis of what is measured and how it is measured.* Two tests that are simple to administer and require little equipment are the AAPHERD Youth Fitness Test and the test of the President's Council on Physical Fitness and Sports. Both can be obtained in booklet form from their publishers.

It is advisable when testing to keep in mind the comments on observation from the chapter on testing and screening.

Once identified as physically unfit, children need developmental programs to at least bring them up to average. Participation in activities that develop circulatory-respiratory endurance and muscular strength and endurance will correct the deficiencies of most underdeveloped children, but it may be necessary to prescribe more specialized exercise. These programs can be independent studies outside of class; special exercises in class; or separate developmental classes. Retest after a period of weeks to determine if performance has improved.

In devising tests and developmental programs it might be helpful to remember the organic and motor compoents of fitness.

Organic performance includes:

- *Strength:* maximal or near-maximal muscular exertion of relatively brief duration.
- *Flexibility:* ability of body segments to move through normal range of motion.
- *Muscular endurance:* submaximal muscular effort which extends over a relatively long period of time.
- *Cariovascular endurance:* ability of respiratory and circulatory systems to adapt to demands of prolonged, total-body physical exertion.

Motor performance includes:

- *Balance:* ability to maintain proper relationship between the body's points of support and the center of gravity.

- *Agility:* ability to change directions rapidly while maintaining body control.

- *Speed:* ability to rapidly transverse straight, short distances.

- *Coordination:* skilled movement resulting from muscular contractions of the proper time, intensity, and sequence.

References and Resources

1. AAHPERD, **Youth Fitness Test Manual**, 1900 Association Drive, Reston, VA 22091, 80 pp. $3.00

2. AAHPERD, **Fitness Program for Mentally Retarded**, 1900 Association Drive, Reston, Va 22091, 56 pp. $2.50.

3. AAHPERD, **Implementation of Aerobic Exercise Programs**, 1900 Association Drive, Reston, VA 22091, 160 pp. $5.50.

4. Governor's Council on Physical Fitness and Sports, Pennsylvania Department of Health, Harrisburg, PA 17126.

5. Pennsylvania Blue Cross, **Food and Fitness, Help Yourself, Get the Life That's Coming to You, Childhood**, 100 Pine Street, Harrisburg, 17101. All at no cost.

6. President's Council on Physical Fitness and Sports, Room 3030, Donohue Building, 400 6th Street, S.W., Washington, D.C. 20201.

7. Pennsylvania Department of Education, **K-12 Physical Competencies**, 333 Market Street, Harrisburg, PA 17126.

PSYCHOMOTOR SKILLS

Basic Motor Skills

It has been said that "after five or six years, on the average, no new basic motor skills appear in the child's repertoire. Rather, the quality of performance in motor tasks continues to improve."

Many of the basic motor skills (definitions of which appear at the end of this section) develop naturally and in predictable sequence if children are exposed to skills and have opportunities to practice them. Children who have not mastered these skills, however, tend to fall further and further behind children who have mastered them and who are using them in more complex patterns.

An assessment of basic motor skills can provide vital information about children's abilities and physical education needs. Many kinds of assessment forms have been used to evaluate motor skills. Some of these require the teacher to understand the mechanical aspects of the motor skills but others appear in a checklist format and describe the specific motor behaviors for which the teacher should be on the lookout. Because these checklist forms approach motor skill evaluation as a screening procedure, they are particularly useful to the classroom teacher.

The Clark Motor Development Scale for Young Children is used extensively to assess student's motor skills.

Additional psychomotor tests are reviewed in "Testing for Impaired, Disabled and Handicapped Individuals" published by AAHPERD.

Assessment of children's basic motor skills can be done more informally watching them play. Observe the various parts of children's bodies while they move. How do they move their arms or legs? Do they appear to be balanced? What do they do well? If instructors are unfamiliar with the mechanics of some skills, they should carefully watch someone in the class who appears to possess a reasonable mature pattern of movement and mentally compare the movements of the others.

The results of some of these tests can help a teacher determine a child's relative position on the continuum of motor development and affix a "motor age" or "motor quotient" score to the records. The data is then used to familiarize the teacher with the child's abilities and to determine a baseline for developmental programming.

During the formative first six years of life, children must become familiar with their environments and learn to evaluate their own actions and the actions of others. To accomplish this, children must develop a number of perceptual-motor skills. These include recognition of many features of the environment and awareness of their outside world; awareness of themselves as distinct from their environment; motor skills; and the ability to change the form and placement of objects by grasping holding, releasing, squeezing, pulling and tearing. Mastery of these skills enables children to take command of themselves.

Dr. David Auxter, Slippery Rock State College, has identified 11 components of movement in which perceptual and conceptual development are linked most closely with motor development:

1. Spatial relationships pertain to the ability of children to orient their bodies in relation to the space around them. Movement exploration activities are excellent means of developing this ability. The teacher should try to include activities which develop children's awareness of the possibilities of movement in a defined area or space they occupy; help them explore the sides and bottom limits of space; help them explore the

dimensions of space with feet as well as hands; temporarily change the dimensions of the children, thereby altering the way they relate to the space around them (for example, have them stand on a box or table, walk around on their knees, or stoop and carry an object which makes them much wider (a long stick, a wide carton), and so forth.

2. Body awareness includes awareness of actual body movement and movement potential. The initial approach should be to investigate the movement potential of each part of the body by making each joint move through the maximum range of motion; exploring the movements of the fingers, the wrist, the elbow and the soulder; and combining several movements such as the fingers and wrist on the fingers, wrist and elbow. The same technique can be used with the neck, body and lower extremities. Activities that involve the whole body in curling, stretching, hanging, bending and twisting are also helpful.

3. Continuity refers to the ability to control one's own movements to stop, start, accelerate and change direction at will. It also refers to the ability to continue a particular movement over a period of time. Activities which may help develop this ability include walking and stopping on command, running and stopping on command, running and changing direction on command, running and dodging another student and changing the speed of locomotion on command.

4. Dynamic balance is the ability to counteract gravitational forces and keep the body properly oriented in relation to the earth's surface. Activities which help promote this ability include balance beam stunts, trampoline stunts, hop scotch games, skating, bicycling and walking on stilts.

5. Time concept concerns the ability to detect changes in speed of movement and to vary the speed of one's own movements. Exercises include locomotor activities such as walking, running, skipping and jumping performed at various tempos - slow, slower, fast, faster - and in rhythm.

6. Levels refers to the ability to maintain the efficiency of movement when one's center of gravity is at varying distances from the ground. Some activities are performed in a bending or squatting position while others require considerable stretching. Drills may include: a. walking around a room or play area while gradually bending more and more at the hips; b. gradually straigthening up from the position reached in (a); c. employing the same motions in (a) and (b) in an obstacle course.

7. Weight transference involves transferring body weight from one part of the body to another. Examples of activities include transferring the weight from one hand to the other by doing the seal walk or the cartwheel or walking along the horizontal ladder; transferring the weight from foot to foot, as in running, walking and jumping; transferring the weight from one foot back to the same foot, as in hopping; transferring the weight from feet to hands, as in tumbling; and transferring the weight from front to back, as in rolling.

8. Force acceptance, a common element in many motor activities, refers to the ability to absorb force or impact. Inability to accept gravitational force results in loss of balance, which in turn may jeopardize the safety of the person when landing from jumping or locomotor activities. Accepting force or impact with the hands, as in catching or deflecting a ball, is more complex because it requires deliberate movement and the willingness to accept mild discomfort. Activities to develop this ability include jumping, hurdling over objects, catching and hitting.

9. Force production is the ability to apply force to external objects. Activities which help develop this ability include throwing, kicking, jumping, striking and pushing.

10. Force adjustment is the ability to gauge the amount of force required to achieve a desired result. Examples of activities which improve force control include throwing balls or beanbags into baskets or targets drawn on the floor, throwing and catching at varying distances and kicking a ball to designated targets at varying distances from the kicker.

11. Locomotion is the ability to move from one place to another. Locomotion skills include crawling, creeping, walking, running, skipping, and galloping. These skills are particularly important because they provide opportunities for the children to explore space, the objects in space and relationship to these objects. By using these skills, they construct their spatial world.

Basic Motor Skill Activities

In the following section both *teacher-directed activities* and *Task-oriented activities* are provided to assist in the development of perceptual-motor growth. You will find that the task-oriented activities for children aged four through nine are not primarily "game" oriented. Although games contribute to the learning process, they seem to best fit into the overall picture after the basic motor skills have been mastered. Teachers may wish to use games in a limited way during class and more extensively during recess or lunch breaks to reinforce classroom instruction in physical education.

Learning to move with control, expression, efficiency and skill in a variety of ways contributes greatly to a student's development of a self-concept and a sense of accomplishment, knowledge and physical prowess. Young children on the primary level in school are ready for learning movement skills. It is essential that a program of instruction, especially on this level, be presented by assigning simple tasks first and them moving to more complex tasks.

An important aspect of developing a planned program of instruction in physical education is to first *assess* the capabilities of the students; and them prescribe activities based on the results of the assessment.

BASIC MOTOR SKILLS

A motor skill is an action which is limited in extent, involving a single movement or limited group of movements performed with a high degree of precision.

Arnheim, Auxter and Crowe (2) have listed these basic movement skills:

1. *Balancing:* Innervation of one side of the body against the other to maintain body equilibrium against the forces of gravity.

2. *Bending:* Flexion, extension, abduction, adduction, circumduction, eversion, inversion, utilization of all the dimensions of movement of each joint of the body.

3. *Catching:* Executing the complicated match between the hand and the eyes in an attempt to control an object moving through external space.

4. *Climbing:* Using the arms and legs to raise the body against gravitational force.

5. *Crawling:* A developmental pattern using hands and legs in a prone position to move.
6. *Crounching:* Flexion of ankles, knees, hips and trunk.
7. *Dodging:* The ability to stop and change direction relative to visual or auditory cue.
8. *Dribbling:* Matching hand and eye or foot to control a ball bouncing or rolling on the floor while moving the entire body.
9. *Falling:* Acceptance of foce as a result of gravitational pull.
10. *Galloping:* Running with a leap interpolated after every other stride.
11. *Hanging:* Resistance of weight against gravitational pull with arms or legs fixed.
12. *Hitting:* Contact with hand on an external object (implement not used).
13. *Hopping:* Propulsive force exerted by one or two feet, but both feet contact the ground simultaneously.
14. *Jumping:* Propulsive force exerted by one or two feet, but feet contact the ground simultaneously.
15. *Kicking:* Matching foot and eye so the leg may exert force propel an object.
16. *Landing:* Acceptance of loss of kinetic energy when contacting a surface.
17. *Leaping:* Propulsive force made by one foot with the landing made on the other.
18. *Lifting:* Overcoming gravitational force of an object by external resistance to muscles of body.
19. *Passing:* Propulsive force given to an object held in the hands (many times a graded response).
20. *Pivoting.* Transference of weight to one foot, angular velocity applied to move body around a fixed point.
21. *Pulling:* Overcoming a resistance so that the object will move toward you.
22. *Punching:* Hitting with no preliminary movement.
23. *Pushing:* Overcoming a resistance in a direction away from the body.
24. *Reaching:* Movement of arms away from the medial aspect of the body. Raising the center of gravity. Transfer of center of gravity to a rhythm. Smooth transfer to weight of one segment of the body to another.
25. *Running:* Locomotion in which a flight phase is genrated (from continuous movement).
26. *Skipping:* Continuous movement in which a hop is followed by a leap.
27. *Starting:* Overcoming inertia of the body at rest by a muscular contraction.

28. *Stopping:* Overcoming inertia of the body while it is in motion to bring it to a rest.

29. *Stretching:* Movement of a joint that takes the limb as far as it can go.

30. *Striking:* Using an implement to hit an object.

31. *Swinging:* Movement with the body suspended with rotary movement around a fixed appendage.

32. T*hrowing:* Imparting force to an object held in the hand and releasing it to give it desired direction.

33. *Trotting:* A slow run in which there is a flight phase.

34. *Tumbling:* Continuous transfer of weight from one part of the body to the other in a smooth fashion.

35. *Twisting:* Rotation of a body part with or without accompanied movement.

36. *Vaulting:* Transfer of weight from feet to hands to feet.

37. *Walking:* Continuous locomotor movement with the body in an upright posture.

38. *Stooping:* Hip, knee, and ankle flexion that lowers the center of gravity over the base.

The chart below shows which of the 38 basic skills can facilitate the development of each general perceptual-motor component. Activities utilizing these skills can be developed to aid in perceptual-motor growth.

BASIC MOTOR SKILLS WHICH FACILITATE THE DEVELOPMENT OF PERCEPTUAL-MOTOR COMPONENTS

General Perceptual-Motor Components	Basic Movement Skills
1. Spatial Relationships	2, 4, 18, 20, 24, 29, 31, 35, 38
2. Body Awareness	2, 6, 11, 24, 29, 31, 34, 35, 38
3. Continuity	7, 13, 14, 17, 25, 26, 27, 28
4. Dynamic Balance	1, 7, 13, 14, 15, 16, 17, 20, 24, 28, 36
5. Time	3, 10, 13, 14, 17, 25, 26, 31, 33, 37
6. Levels	2, 6, 7, 18, 24, 29, 34, 38
7. Weight Transference	4, 5, 7, 17, 27, 28, 33, 34, 36, 37
8. Force Accpetance	3, 8, 9, 12, 13, 14, 15, 16, 17, 30, 36
9. Force Production	8, 12, 13, 14, 15, 17, 19, 21, 22, 23, 26, 30, 32, 36
10. Force Adjustment	8, 12, 15, 17, 18, 19, 22, 23, 30, 32, 36
11. Locomotion	5, 7, 10, 13, 17, 25, 26, 33 34, 37

STUDENT
EVALUATION

Clark Motor Development Scale for Young Children*

Name of child ______________________ Age ____ ____ Sex ______
Years Months

Physical defects if any ______________________

Score four points for accurate total performance of each numbered item except item 12. Item 12 counts for eight points.

Items 1, 2, and 8 call for accurate performance on the right and left sides of the body. Score two points for accurate performance on one side only. In item 12, score two points for accurate performance of each *crossover* item.

				Yes	No	If yes, score
Balance (12 points maximum)	1. Stand on one foot for ten counts, eyes open (right and left feet).	1.	R			
			L			
	2. Hop on one foot in a circle 12 inches in diameter for ten counts (right and left feet).	2.	R			
			L			
	3. Walk a balance beam or straight line forward for six feet, heel-toe fashion.	3.	R			
			L			
Large coordination (16 points maximum)	4. Jump or leap over a space three feet wide.	4.				
	5. Gallop 20 feet.	5.				
	6. Skip.	6.				
	7. Catch a beanbag thrown by a tester from eight feet away.	7.				
Small coordination (eight points maximum)	8. Touch fingers independently.	8.	R			
			L			
	9. Open and close hands alternately.	9.				
Space (four points maximum)	10. Go under a yardstick placed between two objects near the child's waist level.	10.				
Flexibility (four points maximum)	11. Touch the nose or forehead to the floor.	11.				
Mirror movements (eight points maximum)	12. A. Right hand to left ear.	12.	A			
	B. Left hand to right ear.		B			
	C. Right hand to left knee.		C			
	D. Left hand to right knee.		D			
Relaxation (four points maximum)	13. Able to lie quietly and be moved without tension.	13.				
					Total score	0

Date of examination ______________ Examiner ______________

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*Adapted from *Clark Motor Development Scale for Young Children* (Downey, Calif.: Office of the Los Angeles County Superintendent of Schools). Used with permission.

Directions for Administering the Clark Motor Development Scale for Young Children

Balance

1. Stand on one foot for ten counts with the eyes open. The child stands with weight on one leg only—first on the right leg with the left leg bent at the knee so that the lower leg and thigh are approximately at right angles. Position is held for a ten-second count. Repeat on the left foot. This should be demonstrated by the examiner. A second chance may be necessary. The child should exhibit steady balance on both sides.

   Score: Two points for correct performance on the right side

2. Hop on one foot in a circle 12 inches in diameter for ten-second counts. Have the child stand first on the right foot inside the circle. On the command *Start!* the child starts to hop up and down on the right foot without traveling. The child should stay within the confines of the circle. If the child wanders outside the circle or touches the other foot to the ground, the score is negative. If the child continues to hop in place for ten-second counts, the score is positive. Repeat on the left leg. This should be demonstrated by the examiner. A second chance may be necessary.

   Score: Two points for correct performance on the right side
   Two points for correct performance on the left side

3. Walk a balance beam or straight line forward for six feet in heel-toe fashion. The heel should come in contact with the toe of the opposite foot, and the foot should be in contact with the line. The score is positive if the child can continue this relationship for the length of the line. The score is negative if the heel does not touch the toe or if the foot does not make contact with the line. This should be demonstrated by the examiner.

   Score: Four points for correct performance

Large Coordination

4. Jump or leap over a space three feet wide. Chalk lines may be drawn or jump ropes placed three feet apart on the ground. Ask the child to jump over the lines. Any form of leaping or jumping is acceptable. Give a positive score if the child can clear the space. This task should *not* be demonstrated.

   Score: Four points for correct performance

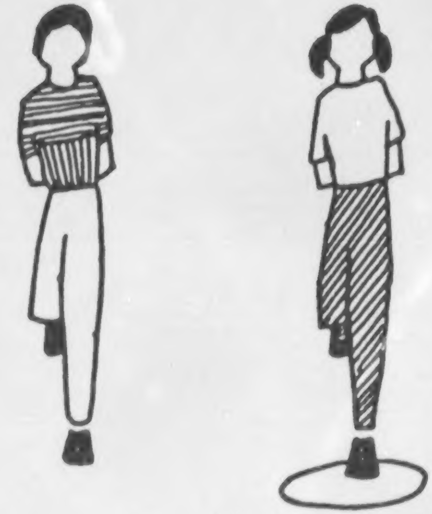
5. Gallop 20 feet. Galloping is a rhythmical skill. The same foot continues to lead. Designate an area approximately 20 feet long. The examiner might say, *"Try to gallop like a horse from here to there."* This task should be demonstrated: *"A gallop looks like this."*

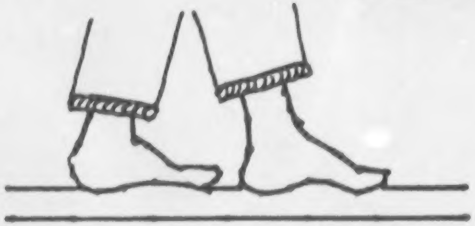
   Score: Four points for correct performance

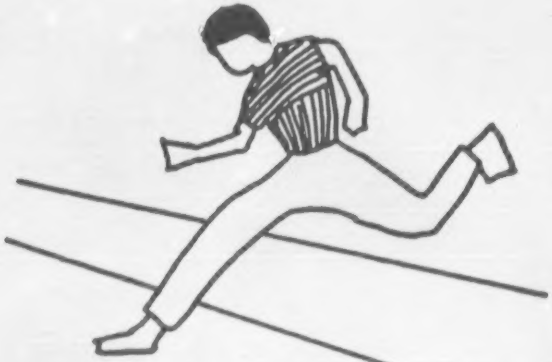
6. Skip with two feet. Skipping is a difficult skill for young children. However, a small percentage of the children may have acquired this skill. Say, *"Can you skip? Show me."* This task should be demonstrated.

   Score: Four points for correct performance

7. Catch a beanbag. Say, *"Try to catch this beanbag."* Make an easy toss from approximately eight feet away. Use a large, soft beanbag. The child may want to feel the beanbag first to see that it is







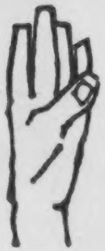
soft. The score is negative if the child does not catch the beanbag or catches it only after the bag hits the child.

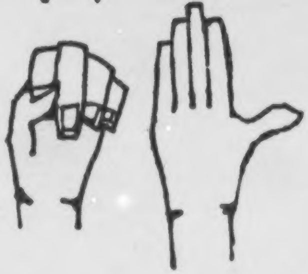
Score: Four points for correct · erformance

Small Coordination

8. Touch the fingers independently. The child is to touch all the fingertips of one hand in succession, independently, with the thumb of the same hand beginning with the little finger. The child then repeats the task in reverse order, starting with the index finger. Say, *"Let me see you touch your fingertips with your thumb."* The examiner demonstrates: *"Start with your little finger and touch each finger in order like this. Then go back again to the little finger this way. . . . You do it. . . . That's fine. . . . Now let's try with your other hand."* A trial consists of child's touching each finger successively and repeating the test in reverse order. A trial is failed if the child touches a finger more than once, touches two fingers at the same time with the thumb, or skips one or more fingers. The test is passed if one of two trials is successful for each hand.

   Score: Two points for correct performance on the right side
   Two points for correct performance on the left side

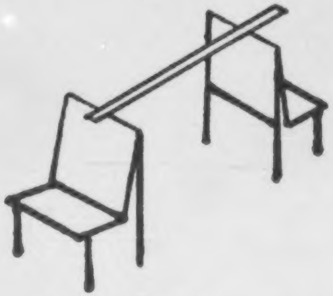




9. Open and close the hands alternately. The child is to hold the upper arms close to the body, bent at the elbows, forearms extended in fromt, palms up. Start with both hands clenched in a fist. The examiner should say: *"Open one hand and close it. Now open the other one and close it. Keep going, one hand at a time."* Correct performance should be demonstrated. It may be necessary to start out doing the movements with the child; however, the examiner should stop doing the movements to observe if the child is able to perform the task. Correct performance is demonstrated by the ability to open and close the hands alternately without superfluous movements or without a change in the beginning position. Speed of performance is not a factor. Duration is about six seconds alone.

   Score: Four points for correct performance

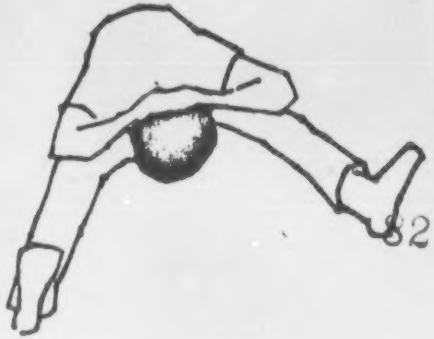
Space



10. Go under a yardstick. Place a yardstick between two objects approximately at the child's waist level. The backs of chairs work very well, especially if they have several rungs. Say to the child, *"Try to go under the stick without any part of you touching it."* Score is positive if the child does not touch the yardstock. Allow only one trial.

    Score: Four points for correct performance

Flexibility



11. Touch the nose or forehead to the floor. The cnild sits on the floor with legs spread, hands behind neck. *"Try to touch your nose or head to the floor."* Score is negative if child cannot reach the floor with head or nose.

    Score: Four points for correct performance

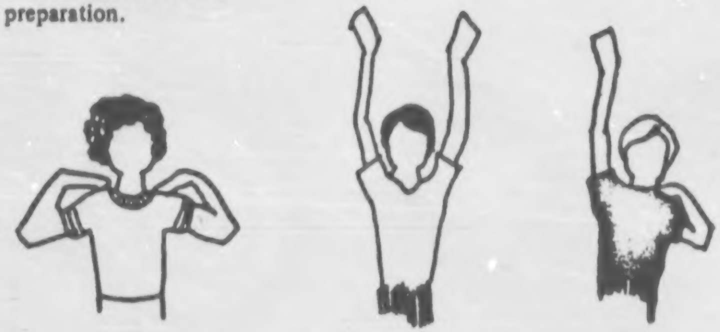
Mirror Movements

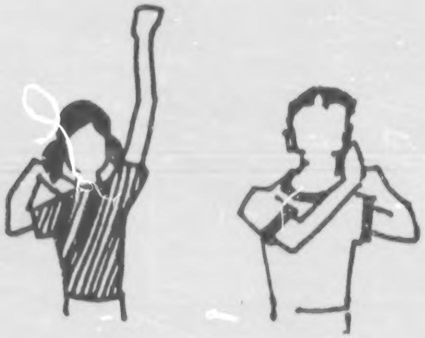
12. Examiner stands facing the child and performs a series of movements one at a time. The child repeats the movements immediately after the examiner. The examiner says to the child, *"I'm going*

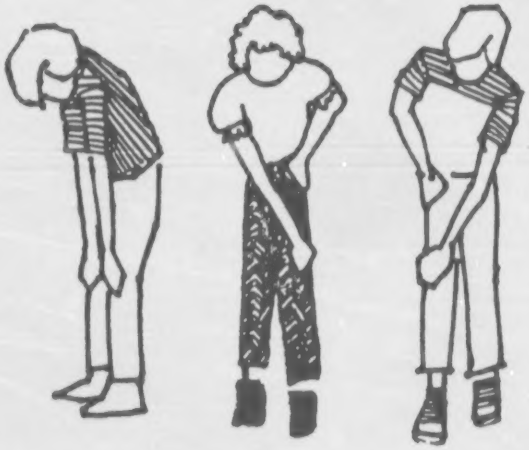
to do something with my hands, and you do just what I do." Only the movements that involve crossing over the body are scored (A, B, C, D). The other movements are for preparation.

- a. Place both hands on shoulders.
- b. Raise both arms overhead. Return hands to shoulders.
- c. Raise right hand overhead. Return hand to shoulders.
- d. Raise left hand overhead. Return hand to shoulders.
- (A) e. Crossover: Raise right hand to left ear. Return hand to shoulder.
- (B) f. Crossover: Raise left hand to right ear. Return hand to shoulder.
- g. Place both hands on knees. Return hands to waist.
- (C) h. Crossover: Move right hand to left knee. Return hands to waist.
- (D) i. Crossover: Move left hand to right knee. Return hand to waist.

Score: Two points for correct performance on *each* crossover item (A, B, C, D)

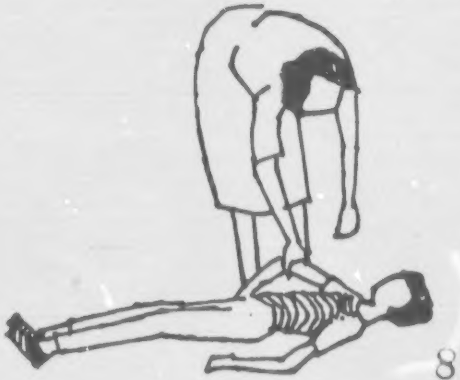






Relaxation

13. Have the children lie on their backs on the floor where they won't touch anyone else, eyes closed. Set a mood verbally: *"Raggity, Raggity, Raggity Anne." "No bones at all; just floppy." "Pretend you are very, very tired."* Ask the children to lie quietly without moving for three minutes. Test for tension. The tester moves quietly from child to child, manually picking up arms or legs, moving them easily and letting them drop. (Ten or 11 children may be tested at one time.)
    - a. Signs of tension:
        - (1) Rigidity: Arm remains like a stick, very stiff—doesn't drop. Difficult to pick up.
        - (2) Preservation: Continual movement after a movement is initiated.
        - (3) Resistance: Difficult to pick up arm or leg. Child seems to be fighting against tester.
        - (4) Helping: Child seems to anticipate tester's movements. When tester initiates the movement, child proceeds on its own.
    - b. Scoring: Moderate tension is to be expected. *Score:* Zero for those children exhibiting high degree of tension. *Signs:* Continual movement, inability to lie quietly, constant fidgeting, excessive giggling. Difficulty in moving parts of the body because of any of the above mentioned signs of tension. *Score:* Four points for correct performance.



Motor Skill Activities*

Component: Qualities of Movement–Space, Flow, Force, Time, Relationships

Teacher-directed activities	Task-oriented activities
Point out that just as one talks while using different expressions and tones and speeds, one can move in the same manner. Review the matter of *space*. Emphasize that space refers to the total area in which movement can take place. *Personal space* is that area around each individual that one can reach without touching another person. *General space* is the area used by everyone when moving from one place to another. Have students explore their personal space by pretending to be glued down and then trying to move. Then have them break loose, burst to another space, and then become stuck again. Discuss and demonstrate *flow*. Point out that flow is the smooth, uninterrupted continuity of one movement to another to create a pattern or a sequence of movements that may or may not be repeated. Have students practice flowing smoothly from one locomotor movement to another to a nonlocomotor combination of movements. Encourage freedom of movement but suggest that the students maintain balance at all times. Point out that *symmetrical* movements are balanced so that both sides of the body look alike or move in an identical manner. Movements that are unbalanced or look different from one another are called *asymmetrical*. Emphasize that *force* is reflected by the tension of muscles as they project strong, moderate, or weak responses. Contrast *force* and *time* so that it is clear that one may change the timing of a movement from fast to moderate to slow and still demonstrate strong, moderate, or weak degrees of force.	Challenge students to move: Fast within a small space. Slowly throughout a large space. Explosively! In, out of, up, down, and around an object. Slowly, then faster and faster and faster. Freeze! With force, without force; steadily, unsteadily; heavily, lightly; slow, fast. In a curved path; a straight path; an uphill path; a downhill path (with an imaginary load; without an imaginary load). Softly, with big movements; softly, with tiny movements. With wide steps; with narrow steps. With wide, sticky steps toward a partner; with narrow, squishy steps away from a partner. As though initiating force; absorbing shock. Zigzag through an imaginary haunted house. Tightly and loosely in a circle. From one place to another in a direct line. From one place to another in a broken line. Above someone; under someone. With continuous, flowing movements of the arms and head. With jerky movements of the head, arms, body, and legs. As though meeting a partner in a relaxed (tense) manner. In a flow from one movement to another and to another. With big movements; with small movements. To the left, softly; to the right, heavily. With the rounded parts of the body; with the pointed parts of the body. While slowly accelerating; quickly decelerating. With one body shape across the room; with another body shape on a return trip. With unequal steps.

Component: Locomotor Movements–Crawling, Creeping, Walking

Teacher-directed activities	Task-oriented activities
Instruct students to crawl or creep in cross-patterned movements. Point out that *crawling* is done on one's hands and knees and that *creeping* is done in an extended prone position. Encourage the students to look at their extended hands as they crawl or creep. Point out to students that they should be aware of safety hazards and crawl or creep on smooth surfaces only; that is, on surfaces free of splinters, glass, and so on. Instruct students to step from the heels to the balls of their feet and on to their toes. Encourage them to swing their arms in opposition. Use verbal cues as students walk, with or without rhythmic accompaniment: "Toes straight ahead." "Walk tall." "Head up." "Knees over the feet." "Chin and stomach in." "Swing the legs from the hip." "Strive to be smooth." "Swing the arms in opposition." "Lead with the chest." Have students play follow-the-leader in small groups, using walking or creeping movements within established space. Change leaders frequently. Have students take a walking tour of the school–inside and outside. Point out the boundaries, safety rules, various pieces of playground equipment, and so on. Encourage pupils to march, tiptoe, glide-step, and walk leisurely during the "adventure." Emphasize good posture (see the appendix). Set up an obstacle course, using tires, cones, ropes, and lines. Have students crawl or creep and walk through the course. Use verbal or musical sound cues to indicate when the students are to change from one kind of movement to another. Emphasize the characteristics of good posture as students practice walking: opposition; carriage; straight but comfortable body alignment; and placement of the feet in a straight line (see the appendix).	Challenge students to creep or crawl or walk: Into and out of the space provided without bumping into anyone or anything. In as many different ways as possible. Slowly (fast) in a big circle; a small circle. Slowly at first; quickly at the finish; and vice versa. Using very long (short) movements. As if happy (sad, tired, angry). High at first; low at the end; and vice versa. In as many directions as possible. Like bears, rabbits, dogs, cats, camels, elephants. Away from the instructor until a signal is given and then toward the instructor until told to freeze. In a zigzag manner. Challenge students to walk: Straight as an arrow; bent over with age. While doing something else. Sideways to the right; to the left. In circles while going away from (toward) the instructor. Around an object that is stationary (moving). With a partner in step; out of step; at the same time; faster; slower. In as many ways as possible with a partner. Tall, with toes pointed forward; outward; and so on. On tiptoes in a straight line; in a circle. With steps as tiny as possible; as big as possible; fast; slow. Noisily; quietly. And change directions at a signal without touching anyone else. And change directions but remain facing in the same direction. And keep hands low (high) while moving at a low (high) level.

Component: Locomotor Movement–Running

Teacher-directed activities

Instruct students to run with their heads up, chin parallel with the floor, weight on the balls of their feet, arms swinging in opposition, elbows and knees bent, chest up, and shoulders level. Encourage the students to lean slightly forward from the ankles and keep their foot pattern parallel, with the toes of each foot pointing straight ahead as it assumes the body weight.

Correct students as needed so that they give equal use to both sides of their body, taking long, striding steps with each foot or short, quick steps for fast acceleration.

Point out that joggers put their heels down first and then their toes when jogging but that sprinters run on the balls of their feet at all times. Of course, both joggers and sprinters bend their knees to absorb force.

Teach students to stop by jumping to a forward stride position, extending their hands and arms forward and sideward for balance; or by dropping their center of gravity (body) to a lower position and taking short, quick steps, keeping the arms extended for balance, until the students come to a halt.

Have students practice running short distances and stopping when a signal is given. Correct those students having difficulty by reviewing the items previously described, demonstrating areas of deficiency and the means of correction.

Increase running distances gradually and have students run for enjoyment.

Emphasize that students should always be alert while running so that they will not bump into others, turn their ankles because of uneven terrain, or be in danger because of other moving objects (for example, bicycles, cars, balls).

Task-oriented activities

Challenge students to run:

In an identified space without touching anyone else.
In as many different ways as possible.
First in one direction and then in another.
Slowly, then quickly, and vice versa.
With long steps; with short steps.
Like a giant; like a dwarf.
As far as possible in six steps.
As fast as possible in place.
And stop when signaled to do so without losing balance.
At different levels: high, low, medium; with and without rhythmic accompaniment.
Around squares, triangles, circles, rectangles.
To certain colors and back to a starting position.
To identified numbers to touch them and back to a starting position.
To the right; to the left; toward the instructor; away from the instructor.
And do something else with their bodies (stretch, twist) and parts of the body (clap, wave, shake).
With knees high in time to a rhythm.
With arms held out gracefully and with long, gliding steps taken in time to a rhythm.
With partners; in threes and fours; in step; in time; fast, slow, high, low; with and without rhythm.
In circles while moving forward; backward.
As though on ice.
As though a sticky substance is spread everywhere.
While balancing a beanbag on their head.
While jumping rope.
While turning around and around.
While being chased by a partner and, when tagged, running after that person without bumping into any other tagging partners.
As far as possible.

Component: Locomotor Movement–Hopping

Teacher-directed activities	Task-oriented activities
Point out that *hopping* means taking off and landing on one foot. Have students jump in place on two feet, then hop on one foot, and then hop on the other foot. Encourage students to lift or swing their arms in the direction in which they are going; hold their head high and chin parallel with the floor; bend their knees and ankles to get more spring and absorb the shock of landing; keep the inactive knee bent to keep the foot from touching the floor; and land on the toes, ball of the foot, and finally the heel if needed. (It is possible to hop and never use the heel for thrust.) Have students hop in place on one foot and then on the other; hop from place to place and return on the opposite foot. Ask students these questions: What makes it possible for you to hop higher? Where should you look when you are trying to hop straight ahead? Why do you have to bend your knees when hopping? What can you do to keep your balance while hopping? Point out that pushing off the surface with one's toes will increase leg power and result in bigger hops. Help students *avoid* bending too far forward; hopping too low; taking off on one foot and landing on the other; touching the nonhopping foot to the surface; turning the knees inward; and being stiff. Have students play follow-the-leader. Change leaders often. Encourage the leader to hop forward, backward, sideward; take long hops, short hops, and so on. Have students hop to rhythms provided by recordings, drumbeats, or clapping. Have students hop as high as they can; as fast as they can. Have students play relays while hopping to and from a beanbag.	Challenge students to hop: In different ways. Into and out of the space around their classmates without touching them and without putting their nonhopping feet down. As fast (slow) as possible. Fast at first, then slowly (and vice versa). Into and out of a circle (hoop, tire). Over and back across a rope. As high (low) as possible. In one place; in many places. As far as possible in five hops. With their arms folded across their chest. With their arms swinging upward. With their eyes closed and in circles. While holding the toes of their nonhopping foot. In big circles; in zigzag courses; around a square; and so on. Toward (away from) the instructor. High and then low twice in time to an Indian beat on a tom-tom. Forward; backward; sideward, to the left and right. Six times, run eight steps, then hop again. As though they were silly; angry; frightened; dizzy. Into and out of a line of cones (chairs). Around a partner. With a partner, in step and out of step. With three or four classmates while holding hands; without holding hands but in time to music or a drumbeat. In a pattern using hops, running steps, and walking. While balancing a beanbag on their head (on their free foot); knee; head and knee.

Component: Locomotor Movement–Jumping

Teacher-directed activities	Task-oriented activities
Point out that *jumping* means springing evenly into the air from one or both feet and landing on both feet at the same time. Have students who think they can jump well demonstrate to the class and then analyze what was done. Point out that the power in a jump comes from quick leg and hip action combined with a strong arm swing in the direction of the jump. Have students jump in place and then from one place to another. Point out that they should place their feet a shoulder width apart, put their weight forward on their toes, crouch, swing the arms forward, and extend the legs forcefully to spring from the ground, leap through the air, and land softly by absorbing the force. Emphasize the need for a soft landing and instruct them to land on their toes, bending the ankles, knees, and hips while stretching the arms sideward and forward to maintain balance. Have students jump in place while making a quarter-turn, a half-turn, and a whole turn. Have them discuss why it is hard to keep their balance and how they might improve their performance (wide stance, use of arms, bending of body to absorb force). Have students play as though they were bouncing balls, jumping in place while being very small and then jumping very high as though they had been bounced very hard. Have students jump and clap their hands over their heads while landing with their feet spread and then jumping back to a feet-together position and clapping their hands to their sides (jumping jacks). Have them perform this exercise several times in succession. Put two ropes in ascending angles (narrow to wide). Have students jump over the widest part they think possible.	Challenge students to jump: In as many different ways as possible. High; low; while turning; from place to place. Fast; slow; in and out; up and down. As far as possible in one (two, three, and so on) jumps. Over an obstacle. Across an obstacle. Down from a step; two steps; and so on. Forward; backward; sideward. Over a rope that is rotated at different heights. And clap, whistle, or sing. And wiggle, shake, or click fingers. And click heels, then land in balance. And spread-eagle, then land in balance. With feet together, apart at the start but together at the end. And spin. With a partner. While holding the hands of three or four other students. While on the run. Into and out of a tire maze. From posts at varying heights. As if frightened; tired; sad; excited. And catch a balloon. And touch the toes in a spread-eagle position ten times in a row without losing balance.

Component: Locomotor Movement–Galloping

Teacher-directed activities

Ask who can gallop and allow those who say they can gallop to demonstrate the movement to their classmates. Describe the action and the uneven rhythm of the activity by saying: "Lead with the same foot." "Take a long step, then a short one." "Keep your toes pointed straight ahead and your knees over your feet, with the body erect; stay on the balls of your feet."

Have students gallop, asking them to use first the preferred foot and then the other as a leading foot.

Encourage students to swing their arms freely as in walking.

Emphasize to students that they should focus their eyes on where they are going.

Have students gallop to music (preferably 2/4 or 6/8 time).

Use a tom-tom to beat an uneven rhythm to accent a long and then a short movement. Use the cue words step, together, step, together, and so on to encourage the correct rhythm.

Encourage students to move in twos, threes, or fours in step and in time to varying drumbeats.

Assist students who are having difficulty to make sure they are not landing on their heels, keeping their knees stiff, or failing to maintain the same leading foot.

Organize students into "herds" and have the "mustangs" go to one destination, the "Appaloosas" to another, and so on.

Allow students to develop a dance in which the walk, run, hop, jump, and galloping movements are used. Perhaps a story dance dealing with the pioneers as they moved westward would be appropriate.

Arrange for students to perform in front of their peers or parents.

Have students do prancing gallops, fast gallops, slow gallops, and so on.

Progress to the polka by having students change leading feet on alternate accent beats of the drum.

Task-oriented activities

Challenge students to gallop:

In as many different ways as possible.

Without bumping into anyone else while moving within a designated area.

As fast (slow) as possible.

Fast (slow) at first and then slow (fast).

As though being chased.

As though hurt; lonely; looking for someone.

Forward; backward; diagonally.

And stay in place.

And turn while moving from place to place.

For six steps; freeze; then hop six times. Repeat.

In a circle; then run back the other way.

Around chairs, cones, trees, and so on.

With a partner.

With a group.

While clapping; roping an imaginary steer; whistling.

Toward the left; the right; the center of the room; the edge of the room.

In time to a drumbeat or music.

And turn a complete revolution to the left; to the right.

Five steps, then jump five times and gallop five more steps.

Fast with one leading foot and then the other.

As though they were cowboys.

And do something else with their arms.

With very long steps.

With very short steps.

Noisily; quietly.

Friskily.

Like a runaway horse.

Like a stagecoach team.

Component: Locomotor Movement–Sliding

Teacher-directed activities	Task-oriented activities
Instruct students to stand on the balls of their feet; move one foot to the side, keeping it on the floor; then move the other foot up to and even with the first foot; place the weight on the second foot; make a slight hop and repeat, leading with the same foot. Point out that *sliding* is just moving sideward as though galloping. Check to see that students are landing on the balls of their feet, not on their heels. Encourage students to stand erect, with shoulders level, head high, chin parallel with the floor, and knees relaxed. Assist students who are having trouble sliding by facing them, holding both of their hands, and slowly going through the rhythmic sequence of step and close, step and close. Increase the tempo as the students gain confidence. Emphasize that the feet should not cross during any of the sliding movements. Have students slide around the area in a large circle. Use an uneven drumbeat to accent the action of the feet. Encourage students to slide smoothly, change directions, and not bump into anyone. Play music (2/4 and 6/8 time) and allow students to slide left; right; forward; back. ("Patty-Cake Polka" and "Pop Goes the Weasel" as well as recordings by the Tijuana Brass are recommended.) Point out that the students can use their arms for balance by extending the arms sideway from the shoulders.	Challenge students to slide: In different ways. Into the center of a large circle without bumping anyone. Sideward in a large circle without bumping anything. Away from the teacher as fast as possible. Toward the teacher as fast as possible. Without allowing the feet to leave the ground (fast, slow; faster, slower). And take big steps; tiny steps. As far as possible six times. While holding their body as high (low) as possible. To the right; to the left. In a figure-eight pattern smoothly (bumpily). In other patterns. To the right (left) while bending or leaning to the left (right). And flap their arms like the wings of a bird. And stretch. While pretending to glide on skates. Into and out of the space around their classmates in time to a clapping rhythm. On their tiptoes. While bending their knees. With puppet animation. While waving good-bye. With a partner (face-to-face; back-to-back). With a group of three (four, five). And then hop; then walk; then slide again. Around a tiny circle. And make up a creative pattern in which all the locomotor movements previously learned are used.

Component: Locomotor Movement–Skipping

Teacher-directed activities

Have students who can skip demonstrate their skill to their classmates

Point out that a *skip* is a step followed by a hop on the same foot The weight of the body is lifted from the floor during the hop. The arms are used to get both balance and height. When a series of skips is performed, the leading foot changes after each step and hop.

Have all students skip around the playing area. Use cue phrases such as *head up, chin parallel with the ground, swing your arms,* and *change leading feet* to improve performance. Call out the names of students who are skipping particularly well so that the others can imitate them.

Encourage those who are uncontrolled and are bumping into others to look in the direction they are headed instead of at their feet; to use their arms for balance and height; and to slow down to maintain control

Help students who are taking a step between skips to learn the necessary rhythm by having them join in verbal reinforcement of the psychomotor action that leads to skipping. Call out "right step hop, left step hop" again and again and faster and faster until the skill is mastered.

Teach the singing game "Skip to My Lou."

Have students skip to music; to drumbeats; to handclaps.

Task-oriented activities

Challenge students to skip:

In different ways.

In a large circle together with other members of the class without bumping into them.

In a small circle without bumping into others.

In all directions, avoiding collisions.

And do something different with their arms.

Forward four times and then backward four times.

In a square; a circle; a triangle.

While holding the body low to the ground, while standing as tall as possible.

First at a low level; then at a high level; then at the regular level.

Giant skips; tiny skips.

As if they were very happy; silly; in a hurry; tired.

And clap.

In place.

And lean their body to the left; to the right.

And bend forward; backward.

To a definite place and back.

Around a tire.

Into and out of a maze of cones.

With a partner in time to a beat.

With two classmates forming a *V*

And make up a pattern combining skipping with other locomotor movements.

Loose as a goose.

Like a wooden soldier.

Like Jack and Jill.

Component: Locomotor Movement – Leaping

Teacher-directed activities

Point out to students that a *leap* is similar to a run in that both feet leave the ground simultaneously. The object is to attain height; remain suspended in the air, springing from one foot to the other; and land under control and with ease.

Have students stand with their weight on one foot, placing the other foot slightly forward. Tell them to focus their eyes on a target at eye level, lean slightly forward, keeping the shoulders level, and extend their arms upward and to the sides for balance. Tell the students to use the leg bearing the body weight to spring into the air, extending the leg not bearing the body weight to achieve a soft landing. The trailing leg, used for the push-off, should be extended backward in the air until a landing is made.

Caution students to land on the whole foot and not the heel. Have them practice hopping or jumping to renew a feel for landing.

Tell students who are losing balance to bend their knees and ankles to reduce shock and to spread their arms to maintain balance.

Use cue words (for example: *head up, chin parallel to the floor, stretch, reach, swing arms up and forward*) to improve performance.

Have students discuss animals that leap and have the students imitate the animals.

Establish an imaginary brook that goes from narrow to wide and have students leap from side to side. Use two long ropes and place them in a V-out so that all students can succeed in their leaping trials.

Have students leap to an even drumbeat.

Have students leap in pairs, threes, and fives, using a diagonal setup so that they can pass one another in tempo.

Use simple obstacles (cones, balls) over which the students can leap to achieve height in their performance.

Task-oriented activities

Challenge students to leap:

As high as possible.
And land as quietly as possible.
Three times in a row.
With one foot leading; then with the other foot leading.
While moving in a straight course.
While moving in a circular course.
Over an imaginary brook.
High; then low; then high again.
Like a deer.
Long; short; long; long; long.
And then run three steps and leap again.
In time to a drumbeat; clapping rhythm; music.
Forward; backward; then forward again.
In all directions without colliding with classmates.
As if happy; excited; angry; sleepy.
With different-sized leaps.
Over a partner.
Over a small box.
Around a partner.
With a partner.
With two others in time to a drumbeat.
And turn while in the air.
And do something else while leaping.
And wiggle during flight.
And "flap their wings" while in the air.
And then run; then slide; then leap again.
And make up an original pattern of leaps and other movements.
As quickly as possible.
As slowly as possible.

Component: Locomotor Movement–Rolling

Teacher-directed activities	Task-oriented activities
Point out that, although *rolling* is a tumbling and gymnastics skill, it is also a means by which a person can get from one place to another; thus, rolling is a locomotor activity. Discuss the skeleton and point out how important it is in protecting a person performing a log roll, shoulder roll, forward roll, backward roll, or human ball. Point out the techniques of a successful roll: *Log roll:* The body is stretched out lengthwise; the wrists are protected; and the hips generate a rolling motion so that the student moves like uncooked spaghetti. *Shoulder roll:* The body is crouched; the arms are used to protect the chest; and as force is applied for the sideward thrust, the weight is taken on the full side of the body and transferred evenly to the back, opposite side, and finally to the front so that a standing position can be regained. *Forward roll:* The head is tucked in so that the chin is on the chest; the weight is taken on the shoulders and hands; the spine is kept laterally straight; the back is curved; and the knees are kept in tight to the body and the arms are thrust forward so that a standing position can be resumed. *Backward roll:* The head is tucked in so that the chin is on the chest; the body is crouched; the hands are placed close to the head (thumbs toward the ears); the feet are used to give an even push-off; the knees are held in close to the chest; the spine is kept laterally straight; the back is curved; and a standing position is resumed at the end of the roll. *Human ball:* The body is held in a seated position; the ankles are held by the hands; the arms are placed inside the knees; and a rolling motion is started so that the body rolls to the side, to the back, to the side, and up.	Challenge students to roll: Like logs. Like balls. In another way. In still another way. Several times in a row. Three times in a row. As though going under a fence. As though they had tripped over a carpet. And then stand and roll again. With a partner. Forward. Backward. Sideward. Like a frog. And then balance on their feet. And keep a hula hoop spinning on the waist. While a classmate leaps over them. And create a movement pattern, using three other types of locomotion. Fast. Slow. Toward the instructor.

Component: Nonlocomotor Movements–Bending and Stretching (Curl)

Teacher-directed activities	Task-oriented activities
Point out that *bending* is the flexing or contracting of parts of the body and that *stretching* is the reverse: that is, the extending of the parts of the body. Ask students to call out the names of the parts of the body that can be bent or stretched and then show how they can bend and stretch those parts. Teach the concept of becoming smaller when bending or contracting and becoming larger when extending or stretching. Emphasize that while one set of muscles is relaxing (contracting) to provide for stretching or bending, another set is extending so that a total range of movement may be achieved. Have students assume a prone position on the grass or floor and demonstrate bending or stretching the neck, shoulders, arms, body, legs, feet, and toes separately and then in simple and complex combinations. Have students kneel, stand, or lie down and bend and stretch various parts of the body separately and then together. Point out how the arms can serve as a source of balance or as a basis of force. Remind students that they should maintain a stable base by distributing their weight equally on both feet (knees) or widening their support to shoulder width while kneeling or standing. Emphasize that keeping the knees bent during the exercises will protect the lower back. Use key cue words such as *curl, tuck, open, close,* and *reach* to enhance the range of motion for which the students strive. Make up problems involving bending and stretching (contracting and extending) and see whether the students can respond positively to the instructions. Examples include: (1) stand on one leg and bend the other as close to the body as possible; (2) bend six parts of the body simultaneously; and (3) stretch one-half of the body and contract the other half at the same time.	Challenge students to: Be as tall as possible. Be as small (short) as possible. Be as wide as possible. Be as narrow as possible. Roll up into a ball. Stretch out like a log. Bend (stretch) the whole body while standing (kneeling, sitting, lying). Bend (stretch) one part of the body. Bend (stretch) two (three, four, five, six, or more) parts of the body while standing (kneeling, sitting, lying). Bend over and stand on all fours. Move without colliding with anyone else while on all fours. (Ask, "What contracts and extends for movement to occur?") Get a partner and perform mirror bending and stretching with and without rhythmic accompaniment. Bend and stretch the legs (arms) while at different levels. Bend (stretch) the parts of the body toward (away from) the center of the body. Stretch (bend) as much as possible (as little as possible). Pantomime waking up. Bend or stretch to form the letters *A, C, D, P, V;* and the numbers *1, 2, 3, 6, 7.* Stretch (bend) to catch an imaginary ball thrown high; low; long; short; down the middle. Bend and stretch to different counts (for example, bend for two counts and stretch for four counts). Bend and stretch in different flow patterns (for example, two movements made jerkily and eight smoothly).

Component: Nonlocomotor Movements–Rising and Falling

Teacher-directed activities

Point out that a fall means a change from an upright position to a prone or supine position.

Have students squat and then sit back, absorbing the fall with the seat. Encourage the students to roll back onto the shoulders by lifting the feet and legs and rounding the spine. Emphasize to the students that they should protect the head by tucking it in at the neck. Then they should extend the body to a prone position.

Have students kneel on the floor and fall forward to a supine position. Point out that this movement is best performed by relaxing the body, leaning forward, and cushioning the fall by placing the hands on the ground and using the arms as springs. Suggest that the students keep the head well back to protect the face and the back.

Have the students stand and then relax so that they fall forward in a spinal pattern to the floor landing on their front or back. (Have students use mats while learning this skill.)

Have students stand and execute a back fall by leaning the upper body slightly forward, swinging the arms backward (fingers pointed forward), relaxing the hips, knees, and ankles, and dropping into a relaxed prone position. Emphasize the need to tuck in the head, take the weight of the fall on the seat and shoulders, and relax. (Have students use mats while learning this skill.)

Have students do side falls by extending the body to a full upright position, arms straight overhead. Have students swing the arms around like a clock to the nine (three) o'clock position, bending the legs and hips to sit on the opposite hip by leaning toward the direction of the fall. They should simultaneously swing the arms back to the three (nine) o'clock position so that the head comes to rest on the upper part of the lower arm.

Encourage students to rise gracefully and efficiently from the back lie position by rolling onto their chests, squatting, and then standing.

Stress the need for total relaxation while falling so that the wrists, ankles, elbows, shoulders, fingers and toes, lungs, hips, upper and lower back, and joints will not be injured. Examine students who have fallen by lifting their elbows and seeing if their arms drop or remain stiff and elevated.

Task-oriented activities

Challenge students to:

Raise different parts of the body and let them fall while standing (sitting, kneeling, lying).

Rise to a standing position from a sitting (kneeling, squatting, lying) position slowly, quickly

Fall softly from squatting, kneeling, and standing positions.

Raise the stomach and flatten the back while lying on the stomach.

Raise two or more parts of the body while lying on the stomach.

Raise the left side of the body but let the right side of the body fall while lying down while kneeling.

Become an inchworm.

Raise the body from a low level to a middle level (low to high, middle to high, and vice versa)

Rise, making the body wide (narrow)

Fall, making the body wide (narrow)

Get up as fast (slowly) as possible

Demonstrate how they would fall (stand) if they were sleepy, sneaky; silly; hungry excited, frightened; happy; sad.

Mirror a partner as they rise and fall in different ways.

Dance in time to "Pop Goes the Weasel," falling in a different way each time they hear the music that suggests the words of the title

Swirl, twirl, and fall as though they were a sea; a whirlwind; a tornado; a fire; a butterfly.

Slide, fall, roll, rise, slide, fall, roll, and rise with (without) grace and with arms swinging.

Dance like Indians and incorporate sideward falls or forward and backward falls.

Component: Nonlocomotor Movements—Swinging and Swaying; Pushing and Pulling

Teacher-directed activities

Instruct students that *swinging* and *swaying* are pendulous (arclike) movements that can be easily repeated.

Have students swing their arms and legs forward and back; side to side.

Have students sway the body like wheat in the field or move the hips like Hawaiians performing the hula.

Have students do mirror swinging and swaying with partners. Encourage them to strive for a full range of movement. Use cue words such as *reach, lift, higher* as the actions are being performed.

Use a rhythmic accompaniment and have students swing the right leg eight times; then the left eight times; then the right leg six times; then left six times; right four times; left four times; right two times; left two times; right once; left once.

Have students combine swinging and swaying with sliding steps or falling motions or other nonlocomotor movements.

Point out that *pushing* and *pulling* involve stretching and bending. Have students assume a wide, stable stance and keep the body in line with and behind the object (real or imaginary) that is to be pushed. Tell students to keep the center of gravity low and the back straight. Have them use a combination of muscles and tendons in the legs, wrists, feet, thighs, and shoulders to push the object forward rhythmically.

Instruct students to pull objects (real or imaginary) by aligning themselves in front of the object, reaching behind to grasp the object or handle, leaning forward (keeping the knees bent and the back straight), and exerting a rhythmic force forward.

Task-oriented activities

Challenge students to swing:

Their arms while standing still; while moving.
Their head like a windshield wiper.
Their head in another way.
A leg (the other leg) while holding onto another person's shoulder.
Both arms; both arms in another way.

Challenge students to sway:

Like hula dancers.
Like water grass (kelp).
Like snakes dancing to music.
In another way; in yet another way.

Challenge students to push or pull (up):

An imaginary baby carriage, wagon, car, wheelbarrow, dog sled, taffy, toboggan.
Like goats, buffalos, elephants, bulls.
An imaginary window that is stuck.
An imaginary rake or broom.
A stocking cap (sweater) over the head.
A river barge.
As though rowing a boat.
As though paddling a canoe.
As though lifting dumbbells.
Against the wall.
A heavy laundry bag.
As though they were taffy being pulled by a huge machine.

Challenge students to:

Push and pull as many parts of the body as possible.
Do push-ups.
Hold a partner's hands and push and pull one another.
Push with the right side of the body and pull with the left side (and vice versa).
Push (pull) in an upward (downward) direction.

Component: Nonlocomotor Movements—Tensing and Relaxing

Teacher-directed activities

Point out that although muscles must have tension to move, continuous muscle tension causes fatigue and strain. Emphasize that each person can control the release of muscle tension and thus relax.

Observe students for signs of tension and gently remind them to relax. Some noticeable symptoms of tension are constant motion, clenched fists, frowns, raised shoulders, and jerky movements.

Provide time for relaxation. Encourage relaxation by playing soft background music and having students rest their head on their desks or stretch out on the floor. Assist any student who shows signs of tension by lifting and moving different parts of the student's body, allowing the parts to drop back gently to a resting position.

Have students wiggle and shake their hands, shoulders, legs, and head and then attempt to let go (relax).

Encourage students to tighten up and then let go to tense and then relax muscles or parts of the body. Vary the length of the time allowed.

Instruct students to stretch like cats as they stand, sit, squat, kneel, or lie down.

Have students pretend to be wooden soldiers to see what tension is like. Then have the students pretend to be Raggedy Ann dolls that are floppy and totally at ease.

Emphasize the importance of breathing deeply when trying to relax. Have the students lie down and breathe deeply, concentrating on the sensations they feel in their legs, arms, bodies, and head. Have students discuss these sensations and then repeat the activity. Emphasize the need to breathe into the lungs so that the rib cage, not the stomach, rises. (In this manner abdominal pressure on the spinal discs can be avoided.)

Task-oriented activities

Challenge students to:

Run, freeze, and then "melt" into a heap.

Lie down and pretend to be a cloud.

Rotate slowly their necks, heads, arms, legs, and other parts of the body and then allow those parts to droop.

Place their body in the position of a ball and then "ooze" to a prone position.

Inhale and exhale in a series of slow, deep breaths.

Push against a wall with their feet (hands) and then relax.

Pull up on the bottom of the chair in which they are sitting and then release.

Lie down, move both shoulders up and down quickly, and then stop altogether.

Lie down, sit up, and then lie down again.

Lie on one side, contract into a ball (fetus position), then extend to a full side prone position (reverse sides).

Respond to restful music or close their eyes and dream of happy times.

Move in response to poems or sayings that describe persons with no bones, cotton candy, fog, mist, rolling surf.

Stretch first one side of the body, then the other.

Compare the sensations they feel in one leg with those they feel in the other leg after lifting the legs alternately off the floor many times.

Roll like a log and then come to rest with a big exhaling breath.

Jiggle or shake various parts of the body and then become a Raggedy Ann or Raggedy Andy.

Push or pull one hand against the other and then rest.

Push or pull two hands (two feet) against those of a partner and then rest.

Sit back to back with a partner, the knees flexed. Push hard enough to stand up together (elbows may be locked), then sit or lie quietly.

Component: Nonlocomotor Movements–Turning and Twisting

Teacher-directed activities

Point out that *turning* is a whirling motion made by giving rotary impetus to the parts of the body as a whole and that *twisting* is the revolving of the parts of the body around the center of the body. Have students spin while taking small steps or by pivoting on one foot or on an imagined skate.

Have students turn (whirl) while standing on their toes; while standing on one foot; while sitting.

Have students twist their hips, arms, legs, ankles, and wrists. Point out that the base of the feet usually remains stationary while the students are twisting.

Watch as students execute twists and turns. If they lose their balance, encourage them to widen their stance to increase their base of support and to use their arms better to maintain balance.

Use cue words and phrases such as "use your arms for balance," "rotate," "push with your feet," and "get enough space" to help students achieve success.

Watch for students who cannot move the parts of their body through the complete range of motion. Once you have discovered these students, have them engage in flexibility exercises (see fitness section) or concentrate on relaxing so that the full range of motion can be achieved. Warn students not to move too far so that the extensor muscles will not be weakened.

Have students discuss things or people (for example, ballet dancers) that twist and turn and then interpret how a person might do the same.

Point out the important role that balance plays in twisting and turning.

Teach students to control their weight by flexing at the knees, using the arms for balance, and increasing the base of support to regain body control after a fast turn.

Task-oriented activities

Challenge students to:

Show how many parts of the body they can twist (turn) while standing (sitting, kneeling, lying).

Twist and turn at the same time.

Turn while taking very small (large) steps.

Turn on one foot; one foot and one hand.

Show in how many directions they can twist (turn).

Twist in two (three) directions at the same time.

Twist so that their right (left) elbow touches the left (right) knee.

Change levels while twisting (turning).

Turn with large (small) movements.

Make their base of support wide (narrow) and twist (turn).

Find out which part of the body they can twist (turn) the fastest.

Twist one part of the body fast while twisting other parts slowly.

Twist one part of the body in one way and another part in another way.

Become a corkscrew.

Become a cowboy spinning a lariat.

Turn and twist in response to lively music.

Grasp a broomstick or a piece of doweling at both ends and, without letting go of the wood, step through and over the broomstick or doweling so that the stick is first in front of the body and then in the back. Reverse the procedure. Discuss which parts of the body had to twist or turn to complete the activity.

Turn with another base of support.

Turn in various ways with the help of a partner.

Turn with something other than the feet as the base of support.

Turn in two (three) directions at the same time.

Component: Nonlocomotor Movements–Beating and Shaking

Teacher-directed activities	Task-oriented activities
Point out that *beating* involves moving the parts of the body against an object or against some resistance. *Shaking* involves moving the parts of the body in short, quick movements. Both movements are usually done in quick tempo. Have students demonstrate the shaking of various parts of the body with and without musical accompaniment. Have students beat the floor first with their hands and then with their feet. Let them tell what they are imagining themselves to be as they execute the movement. Use cues such as *Indians dancing, walking on hot rocks,* and *smashing grapes* to get the students to beat or shake. Have students beat their chests on the first count of each measure and then shake ceremoniously for the other three counts. Have students combine shaking and beating with other locomotor and nonlocomotor movements. Provide tambourines or other percussion instruments and have students create movement and sound patterns. Have groups of students dance while using beating and shaking movements in conjunction with other motor skills. Then have the viewers discuss what they saw. Have students exchange roles. Have students shake as many parts of their body as possible. Have them shake each part separately and then all the parts together. See who can shake the greatest number of parts all at once. Discuss the emotions or themes that are best portrayed by beating or shaking and tell why. Have students work with partners in responding to verbal cues taken from the emotions they had suggested. Extend the activity to a dance composition session and then have the various couples perform for one another. (Examples include fear, terror, war, war dance, and force.)	Challenge students to: Beat (shake) as many parts of the body as possible while standing (kneeling, sitting, lying). Spread the feet apart and then shake the whole body. Keep the feet together and shake. Take the weight on one (two, three, four) parts of the body and then shake all over. Beat (shake) in different directions. Beat (shake) first with the right (left) and then with the left (right) side of the body. Shake the top part of the body and beat with the lower part of the body (and vice versa). Shake while moving in a triangle, circle, or square. Beat the symbol (letter) number called out by the instructor. Move from low to high while beating (shaking). Demonstrate the biggest (smallest) shaking (beating) movement they can do. Show how fast (slow) they can beat (shake). Shake one part of the body fast and another part slow simultaneously. Beat (shake) different rhythmic patterns (for example, four claps, three stamps, two shakes, and fall; stand and repeat). Create a rhythmic shaking routine with a partner; with a small group. Create a beating rhythm that can be sustained or repeated by the group. Combine beating and shaking with other movements. Combine beating and shaking into patterns in time to music. Create a cheer with appropriate shaking and beating.

Component: Nonlocomotor Movements–Starting and Stopping; Dodging; Pivoting

Teacher-directed activities	Task-oriented activities
Point out that all movement must begin with starting and end with stopping. *Starting* is done by giving force to the arms or legs by pushing off a surface with the hands or feet. *Stopping* is relatively simple if speed is not involved but requires an adjustment of weight and absorption of shock if speed is involved. Have students walk in and out of an identified space, being careful not to collide, and then call *Freeze!* The students will come to an immediate halt. Note that if they are moving slowly they can simply cease giving force in order to stop, but if they are moving quickly, they must come to a jump stop, bending the knees and ankles to absorb force and thrusting the arms outward to maintain balance. Have the students practice this technique many times. Then use other locomotor movements and intersperse the command *Freeze!* While the students are walking in and out of one another's area, have them *dodge* by taking the weight on one foot and quickly transferring the weight to the other foot with a push and a slight jump of the body to the nonpushing side. Suggest that the students use their arms to maintain balance while dodging. Teach the students to *pivot* by having them come to a jump stop, feet fairly widespread, and then, keeping one foot stationary, walk toward and around that foot with the other foot to turn in place. Encourage a rocking motion for the body, knees held in a semibent position, and arms thrust outward and upward for balance. Help students who are having trouble with these skills by having the students perform slowly, giving verbal reinforcement to each required aspect of each movement skill (for example: "Push off to start." "Jump stop, bend knees, put arms up for balance.").	Challenge students to: Start and stop on command without losing balance. Run fast and dodge classmates (within a confined area). Walk, freeze, pivot, run, freeze. Run to the right, stop, pivot, and slide to the right. Hop three times, run, stop, turn, walk, and freeze. Run and leap six times and change directions after each leap. Play dodge ball with two other classmates. Play tag within a confined area so that much dodging, pivoting, stopping, and starting will be necessary. Start quickly and stop immediately. Start as though in a race. Start as though off for a leisurely walk (contrast with item above). Stop after running, hopping, galloping, jumping (contrast the needed adjustments). Dodge stationary objects. Dodge moving objects (discuss the need for anticipation). Pivot left; right; high, low. Tap a balloon from one place to another and do not bump into anyone else. Dodge high; low; in-between. Incorporate stopping, starting, dodging, and pivoting into a dance routine. Play "Freeway" by pretending to drive a car from one place to another without smashing the car (set up "traffic lights," "ramps," and so on).

Component: Manipulative Movements–Grasping and Releasing

Teacher-directed activities

Point out that *grasping* and *releasing* are reflexive movements one has performed almost since birth. Emphasize that these movements are necessary for many activities, including eating, writing, catching, throwing, rolling, playing games, buttoning, zipping, lifting, carrying.

Discuss whether all grasping and releasing movements are the same. Demonstrate why the movements are not the same.

Have students squeeze beanbags, yarn balls, or tennis balls and tell how their muscles feel. Talk about the muscles required for the fingers and hand to grasp and release objects.

Ask the students if they can grasp and release with any other parts of the body. Demonstrate the use of the mouth, toes, knees, and legs.

Have students pick up various objects such as pencils, paper, paper clips, rubber bands, balls, bags, balloons, sand, and so on. Ask the students to try to use different ways to pick up the objects and release them with control.

Have students throw yarn balls at targets on a wall. Have the students experiment by releasing the balls high, waist high, and low. Ask them to tell you what the effect was with each different release. Point out how the trajectory is determined (to a great degree) by the point of release.

Play five-man relays involving grasping and releasing. Divide the group into twos and threes for a shuttle. Place a piece of paper in front of the first person in the three-person group. At the signal instruct that person to pick up the paper, walk or run ten meters to the other part of their group, and put the paper on the ground. The second person brings the paper back. This procedure continues until the team members are in their original positions. Emphasize that the paper may not be wadded up or torn.

Task-oriented activities

Challenge students to:

Pick up an object softly; firmly; moderately.

Flex and extend the fingers and toes.

Pick up beanbags in as many different ways as possible.

Grasp and release balls.

Grasp and roll balls back and forth to a partner.

Lift a box, demonstrating the use of a balanced grip and leg action for the lifting process.

Play Pick up Sticks, concentrating on not moving any of the sticks other than the one being sought.

Button up a coat; zip up a jacket.

Pick up rhythm sticks with the toes.

Pick up a marshmallow with the mouth only.

Bob for apples.

Pick up a yarn ball in every possible way.

Cradle a small animal gently in the hands.

Grip a small ball firmly over and over.

Pick up an egg and put it down without breaking it.

Grasp a writing implement and draw a design or letter.

Grasp a chinning bar with an overhand (underhand) grasp, hold on for ten seconds, and release both hands at the same time.

Balance a soft drink bottle on its top inside a small circle, using the feet only.

Shake the hands to remove any strain caused by grasping for a long time.

Tell about picking up different kinds of objects.

Travel across a horizontal ladder, grasping and releasing smoothly.

Use blocks, Tinkertoys, Lincoln logs, or erector sets to build a moving object, a village, or a piece of machinery without dropping any items.

Pick up playing cards or task cards without bending the edges.

Hold a ball between the knees while hopping a distance of ten meters.

Component: Manipulative Movements–Throwing and Catching

Teacher-directed activities	Task-oriented activities
Point out that throwing skills require a forward weight transfer, a focus of the eyes on the target, a release that ensures the flight desired, and a follow-through action to obtain the desired distance. Have students throw yarn balls to one another and talk about the principle of *opposition* (that is, stepping forward on the foot opposite the throwing arm). Emphasize that getting ready to throw is important. Encourage a backward swing, step-through, smooth release, and follow-through. Emphasize the need for the body to face the target and for a concentrated focus of the eyes before, during, and after the action. Point out that catching requires absolute concentration of the eyes; correct body alignment (behind the thrown object and in a straight line with it); a gentle closing of the fingers and hands around the object once touched; and a *giving* (the drawing of the ball or object toward the body with controlled relaxation and a backward weight transfer) in relation to the object to absorb shock. Have students throw and catch yarn balls and talk about the need to reach for the ball as it comes toward the student and then the relaxation of the hands, arms, and body as contact is made. Have students practice throwing in different ways: rolling, underarm, sidearm, and overarm. Point out that force can be increased by stepping quickly as the release is anticipated, increasing the speed of the arc created by the swinging motion of the arm, and using a thrusting motion during the follow-through. Point out that balls (objects) thrown are best caught above the waist by placing the hands in a "thumbs together" position and below the waist by placing the hands in a "little fingers together" position.	Challenge students to: Throw a ball (beanbag, deck tennis ring) up and catch it ten times in a row. Throw an object up, turn around, and catch it before it hits the ground. Throw an object up, clap three times, and catch it before it hits the ground. Move an object back and forth from one hand to another with the eyes open (closed). Play catch with a partner and throw the objects so that the partner does not have to move to catch them. Roll balls back and forth to one another. Throw beanbags and hit a target two meters away (three meters away). Catch balls behind the back while the balls are bouncing. Throw and catch from different levels. Throw objects softly (hard) to a partner. Throw balls or beanbags overarm, sidearm, and underarm to a partner. Catch with one hand; with two hands. Catch balls rebounding from a wall. Throw balls against a wall and catch them before they bounce. Throw and catch with a partner in as many different ways as possible. Throw and catch while moving. Play a game involving throwing and catching. Throw and catch a Frisbee with a partner at least 30 times in a row. Throw a ball so that it spins forward (backward). Throw a ball so that it bounces back. Bounce-pass to a partner. Bounce-pass around an obstacle to a partner. Throw a ball into the air and catch it behind the back. Throw a ball for a distance of ten (20, 30) meters.

Component: Manipulative Movement–Kicking

Teacher-directed activities

Have students spread out before kicking balls so that they have plenty of space; extend the arms forward waist high, step on one foot and swing the other foot backward, then forward, thrusting the leg into an extended position. Encourage a strong follow-through. Allow the students to practice the motions several times while questions are posed: How can you keep from bumping others? Where are you looking as you walk and kick? Can you do the same thing with the opposite foot? Do you need to keep the arms out and forward for balance?

Organize the class so that the balls will be kicked in one direction and rolled back. Have partners take turns kicking and retrieving. Place the balls in a stationary position in front of each kicker. Have students stand comfortably behind the ball with feet apart and slightly off the center of the ball so that the kicking leg can swing forward and contact the ball squarely just below the center. Urge the students to focus on the ball at all times; step forward onto the nonkicking foot; extend the arms for balance, bend the body slightly forward, and swing the kicking leg forward and *through* the ball to strike it squarely with the instep of the kicking foot Have the students follow through by pointing the kicking foot and leg in the direction of the target

Allow students to practice until they consistently feel success Then and only then have them begin to kick rolling balls or to punt.

Play simple, competitive games in groups of no more than five students Suggested activity would include kickball, long base, three-man keep-away, or soccer dodge ball.

Play simple class games of line soccer or kickball until the students understand the game. Once a game is understood by the students, however, it should no longer be played as a class activity. The teacher should encourage students to play the game during recess or on play days.

Create a poster or an individual "I can" profile card containing the challenges listed under task-oriented activities and encourage students to check off each item as they become competent in the skills listed. Correct those students who have difficulty by encouraging them to focus attention on the ball, take their time, and swing forcefully through the ball.

Task-oriented activities

Challenge students to:

Kick a ball gently to another in every way possible

Kick a stationary ball so that it flies into the air.

Kick a stationary ball so that is rolls straight along the ground.

Control-kick a ball down and back for ten meters.

Dribble a ball alternately with the right and left foot for a distance of ten meters.

Kick a ball for distance.

Kick a ball accurately into an area two meters wide that is at least five meters away

Control-kick a ball into and out of obstacles for a distance of ten meters.

Kick a rolling ball into the air.

Kick a rolling ball straight along the ground.

Kick a rolling ball so that it changes direction.

Judge the force needed to kick a ball hard for distance but softly for control.

Kick a ball up to themselves.

Kick a ball while moving.

Kick a ball accurately to a moving teammate (concentrate and anticipate to succeed).

Kick a ball from a kicking tee.

Hold a ball in the hands, drop it while moving, and punt it into the air so that it goes forward at least five meters.

Kick a ball with various parts of the foot and under control.

Analyze the kicking skill of a classmate and give correct cues for improvement.

Aim a kicked ball to avoid interception by an opponent.

Get control of a moving ball, dribble it with the feet for a short distance, and kick the ball for distance.

Drop-kick a ball for accuracy.

Component: Manipulative Movement–Striking Without the Use of an Implement

Teacher-directed activities	Task-oriented activities
Explain to students that they can strike a ball vertically so that it bounces or horizontally so that it travels like a batted ball. Or they can strike the ball so that it is lifted. Point out that a person dribbling a ball should stand comfortably in a stride position, hold the ball in both hands waist high, lean forward so that the weight is on the front foot and the body is slightly bent, push the ball to the surface with one or both hands, and either catch it or continue to push it to the surface. Emphasize the need to keep one's eye on the ball and to relax when trying to catch the ball. Have students bounce the ball to themselves and see whether the students move smoothly. Correct excessive tension, lack of focus, and the slapping of the ball instead of flexing the fingers and pushing the ball. Deflate balls that bounce too high and encourage students to follow through with a little force if the ball does not bounce high enough for the next bounce. As students get older and more skilled, have them look up as they dribble so that they can move and dribble at the same time. Point out that when hitting a stationary ball, students should stand with the nonstriking side of the ball toward the target and should keep their feet slightly apart. They should hold the ball in the nonstriking hand waist high and concentrate on the target by looking first at it and then at the ball. They should swing the striking arm down and back, transferring their weight to the striking side. Shifting their weight forward to the nonstriking side and hitting the ball with the heel of the hand, they should follow through to extend the hand and arm of the striking side. If a student misses the ball completely, cue the student to concentrate on the ball and *not* to toss the ball before striking it. Have students practice hitting balls or balloons until the striking action is easy.	Challenge students to: Bounce a ball and catch it. Bounce a ball in different ways while they are standing still. Bounce a ball in different ways while they are moving. Dribble a ball from place to place. Dribble a ball while they are turning around and around. Dribble a ball into and out of obstacles. Dribble a ball to keep it away from a partner. Bounce a ball to another person and get it back. Dribble a ball as effectively with the left hand as with the right. Dribble a ball between their legs. Dribble a ball constantly while they are standing, kneeling, lying down, and returning to a standing position. Challenge students to volley a balloon: To themselves in as many ways as possible. And turn all about. Over and back across a zigzag pathway. With a partner while the partner holds the balloon suspended on a string. And do something different between each volley. In time to music. Hard, soft, slow, fast; with one hand and then the other; with other parts of the body (hip, knee, ankle, elbow, head, nose, seat). Challenge students to strike a stationary ball with their hand and hit it: Straight. High into the air. To the right (left). At least three meters into the air. To the ground. To a partner.

Component: Manipulative Movement–Striking with the Use of an Implement

Teacher-directed activities	Task-oriented activities
Remind students that striking objects with an implement involves many of the same skills and movements as striking objects without an implement. Students must keep their eyes on the ball; transfer their weight as force is applied; swing the paddle, bat, or racket horizontally to the ground through the ball; and complete the motion with a follow-through. Have students hold a bat with the trademark up; stand with their side toward the pitcher (opposite their dominant hand); keep the body relaxed and the elbows away from the body; keep the nondominant arm parallel to the ground. The students should grip the bat with the nondominant hand just above the end of the bat and the dominant hand comfortably above it; hold the bat off the shoulder; turn the face toward the pitcher; concentrate on the ball; swing the bat backward parallel to the ground and shift the weight backward to the dominant hand's foot. Finally, the students should swing the bat forward parallel to the ground and step into the hit as contact is made with the ball; follow through to the nondominant side; and *drop* the bat on the ground before starting to run to first base. Have students first go through striking motions, using mimetics (pantomiming motions) and finally using the implements themselves. Critique their actions and watch the flight of the ball after impact. If the balls are consistently hit foul or popped up, the batter is swinging too early or too late and is coming up under the ball instead of swinging parallel to the ground. If the hit ball always bounces near home plate, the batter is chopping down on the ball. And if the ball is missed completely, the batter may be closing his or her eyes, failing to concentrate, swinging too early or too late, or standing too close to or too far from the plate.	Challenge students to hit: Balloons or yarn balls with nylon paddles. Balloons suspended on strings in as many different ways as possible, using nylon paddles. Balloons back and forth together with a partner. Balloons or yarn balls back and forth over an obstacle. A ball off a batting tee with a bat. A ball off a batting tee so that a classmate can catch it. Ten fair balls in a row off a batting tee. A pitched eight-inch playground ball with a bat. A pitched six-inch or seven-inch playground ball with a bat. A pitched softball with a bat. A fair ball three out of five times. A tennis ball placed in a sock and tied to a tetherball pole with a paddle or racket so that the ball wraps completely around the pole. Challenge students to play: Rally with a nylon racket. (One player hits a balloon to an opponent, and each one tries to rally so that the other cannot return the balloon.) Long base with four or five classmates. Tetherball with rackets. Work-up with four or five classmates. "Mickey Mouse" tennis (short court and short rackets). Rally against a wall with a six-inch playground ball and a wooden racket. Challenge students to: Analyze their hitting skills by reviewing the steps needed for successful striking. Analyze their classmates to reinforce their recollections of batting. Practice continually because hitting with an implement is an advanced skill. Practice at home with their relatives.

Component: Perceptual Ability–Kinesthetic Discrimination

Teacher-directed activities	Task-oriented activities
Realize that kinesthetic discrimination is treated extensively in this chapter under Goal One: Self-Image. Plan activities related to motor skills that reinforce development of bilaterality, laterality, sidedness, balance, knowledge of the parts of the body and their functions, and ability to locate an object in relation to one's own body. Play games that require students to name various parts of the body and move them under control. Examples of such games include: May I? Simon Says; Hokey, Pokey; and Eyes, Shoulders, Knees, and Toes. Realize that students who reverse letters, numbers, and words when reading and writing may be deficient in knowledge of themselves in relation to space. Plan obstacle courses that require movement in many directions, response to directional stimuli, and a flowing involvement of all parts of the body. (See the appendix.) Ask students to move the parts of the body one at a time as identified and then together at the same time. (Examples: Move your fingers. Now move your fingers, elbows, and head all at once. Move your knees. Now move your knees, ankles, and arms simultaneously.) Work with students through the use of commercial records, games, and call-recall techniques until they can correctly identify parts of the body: abdomen ankles arms back calves cheeks chest chin earlobes ears elbows eyes feet fingernails fingers forehead hair hands head heels hips knees legs mouth neck nose sides teeth temples thighs toes tongue trunk	Challenge students to: Wiggle their fingers, then their toes. Nod their head and blow their nose. Open their mouth and close their eyes. Twist their trunk and let out sighs. Clap their hands and stomp their feet. Bend their knees and make toes meet. Point one finger and then a toe. Move a shoulder and get on the go (walk aro[illegible] Click their fingers and blink their eyes. Lie right down and point their soles to the sky. Tickle various parts of the body as the parts are called out! Determine mastery of laterality by having them: Raise their right hand and then their left. Point their finger at their nose; right knee; toes on the left foot; navel; right eye; right elbow; left heel. Hop three times on the left foot; three on the right. Hold a beanbag on their head; right shoulder; left foot; right hip; right knee; left ankle. Check for kinesthetic awareness reflected in ability to: Stand, sit, and kneel with good posture. Move without noticeable hypertension. Perform the "coffee grinder": The student places one hand on the floor and the other hand on the hip; extends the body and looks at the ceiling; and then walks around the supporting extended arm. Stand, stoop, and stand again without losing balance. Lean forward and backward and sideward without losing balance. Sit on the floor with arms and feet crossed (Indian fashion) and stand without help and without losing balance. Go through a maze without touching any of the objects.

Component: Perceptual Ability–Visual Discrimination

Teacher-directed activities

Realize that visual discrimination is essential to successful performance of most physical skills and that a student whose vision is impaired must compensate heavily for the loss. Students need constantly to receive visual stimuli; discriminate one shape from another (acuity); identify one shape as it moves (tracking); remember visual experiences (memory); and track an object even though the background is absorbing (figure-ground differentiation).

Assess the ability of students to identify similar objects, colors, and symbols. Assist those who show deficiencies by providing game-like drills that emphasize identification procedures.

Have students differentiate between objects by pointing out which object is larger, smaller, blue, red, square and not round.

Prepare large-sized symbols of circles, squares, triangles, and rectangles; and then have students look at facsimiles on a task card and go to a corresponding large-sized symbol, go through or around it, and return for another challenge.

Have students play catch with balls or objects that are relatively the same in color as the background.

Draw imaginary numbers (letters) in the air and have students replicate them with their bodies or a length of rope.

Play Get Something Bigger by placing a small item on the ground and asking each child, one by one, to get something bigger. Continue until nothing larger is available. *Note:* Allow children to point and describe instead of carrying very large items.

Touch various parts of your body while the children watch. Then allow them to touch the same parts of their own bodies in the same sequence from memory.

Task-oriented activities

Challenge students to:

Play with blocks. Have them pick out all blocks that are the same, stacking all red blocks in one place and blues in another. Then have the students scramble the blocks and pick out letters that are flashed in the order in which they are flashed. *Note:* Start with one letter and build to a series.

Look at a shape drawn on the board and then describe items the students can see that have the same shape.

Throw beanbags at the corresponding shape or color on a target. *Note:* The teacher will point to a shape or color and then watch the student's response.

Play flashlight tag so that the students can flash lights at objects as instructed by task cards or written directions in the order outlined.

Become look-alikes. *Note:* The teacher or aide flashes a design, and the students mimic the design by forming it with their bodies or by moving in a like pattern.

Pick out a Ping-Pong ball when it has been mixed with golf balls.

Differentiate the colors of several balloons. Put like balloons together for games or mix unlike ones so that there is a balloon of each color in each small group.

Volley a balloon to themselves; volley with a partner.

See a word describing a movement and then perform that movement (walk, hop, slide, and so on).

Look at pictures and find objects with similar shapes.

Watch the shape created by the teacher's (aide's) flashlight and form a similar shape.

Select a classmate of like height and size as a partner.

Move in and about all of the designated space in response to visual directives without talking to anyone or running into anyone.

Component: Perceptual Ability–Auditory Discrimination

Teacher-directed activities	Task-oriented activities
Realize that auditory discrimination involves the same components as visual discrimination except that auditory discrimination deals with hearing instead of vision. Assess student response to auditory stimuli continually. See how well the students can follow verbal directions, recall sounds, move in response to rhythmic sound, and repeat various sounds in the order heard. Have students play singing games and jump rope to the accompaniment of chants. Have the students follow the verbal directions given in the chants. Provide verbal directions and observe student responses as the students move, dance, play games, and solve movement problems. Clap a rhythm and see if students can repeat it. When it is apparent that students can replicate the rhythm, ask them to move to the sound of their own beat. Have students close their eyes and hop when they hear a whistle; twist when they hear a clap; lie down and kick when a bell rings; and get up and smile when the words *tickle, tickle, tickle* are called out. *Note:* Mix up the sequence and change directions often. Have students work on laterality and directionality along with auditory discrimination by having the students close their eyes and march forward on one clap, backward on two claps, to the left on three claps, to the right on four claps, and around and around whenever a drumbeat sounds. *Note:* Add other directives such as Twist on a shout! and Bend on a whisper! once the children are ready for bigger challenges.	Challenge students to: Act out nursery rhymes. Sing and act out the song "Itsy Bitsy Spider," commercial records that give audible cues for simple and complex movement patterns, and simple stories such as the story of Hansel and Gretel. Listen to a series of sounds and identify them in the order heard. Move to various audible chants such as Clickity clack! Clickity clack! Tickle! Tickle! Tickle! Shhh! Shhh! Pow! Close their eyes and slowly move toward the beating of a tambourine, the clicking of fingers, or the clapping of hands. Respond to words spoken with different intonations. Examples include *flop* (jello flops but fish flip-flop, flip-flop); *sneak* (as in a joke; as in being mischievous); *squish* (as in mud; as in spaghetti; as in water). Listen to foot-tapping patterns and then move to them. Move in a different way. Move at a different level. Listen and count the number of different sounds heard. Repeat their names in the order heard. Close their eyes and stand up when they hear words starting with *l* (or any other letter cited) and lie down when they hear words with *b* as their first letter, roll on words starting with *w*, and become perfectly still on words that start with *f*. Listen to a series of commands to move and then perform the commands in the order given. (Example: Run in place for ten steps. Turn and walk for four steps. Sit and stretch. Roll and stand. Repeat.)

Component: Perceptual Ability–Tactile Discrimination

Teacher-directed activities	Task-oriented activities
Realize that the sense of touch is one of the most basic of our senses and that if it is enhanced, both the auditory and visual senses are stimulated. Point out that in blind people the senses of touch and hearing are relied on completely for communication. Have students explore a wide range of tactile experiences and cue them to corresponding words that describe the textures with which they are dealing. Examples include glass, polished wood, car finish (smooth); sand paper, rough-hewn wood (rough); bolts, bags of sand (heavy); feathers, cotton wads, balloons (light); squares, triangles, circles (shapes); clay, glue, paste (sticky); spaghetti, paper clips (squiggly). Have the students, once they have examined the materials, move according to the feelings produced by the materials. Then have the students learn to match like textures or objects by looking at and feeling one and then selecting an article with like characteristics. Have the students next perform the same task (identification of like objects) blindfolded so that the sensation of touch is the only sense being used. Touch various parts of the body of blindfolded students and ask the students to touch themselves in the same parts and name the parts touched. Again, touch several parts and ask the students to touch the same parts in the same order in which they were touched by the teacher and to name each of the parts aloud. Allow students to wrap themselves in different materials (for example, paper, cloth, blankets, aluminum foil) and then describe the experience. This experience should be followed by opportunities for creative expression. Suggest that students wiggle, squiggle, become mired in mud, walk on water, avoid an angry bee, and dance as though covered with soap bubbles.	Challenge students to: Play in sand boxes and describe the experience. Play in water filled with soap bubbles and describe the experience. Touch various pieces of playground equipment and tell what the texture reminds them of. Touch one object and point to another made of the same kind of texture. Rub fuzzy things gently and then move according to the feelings produced by the rubbing. Reach into a blind box (an enclosed box with holes through which students can insert their arms) and pick up an object (from the many contained in the box) that looks like the demonstration object they had been allowed to see before they reached into the box. Reach into a blind box and select two matching objects from the many found there. Look at and feel simple objects mounted on cards–such as string, matches, beads, ribbon, or rubber bands–and then select a similar object from a bag. Once the object has been selected, have the students use the object as a prop for a dance or simple drama presentation. Lie on grass, a blanket, a mat, or a piece of carpet while blindfolded and identify the material on which they are lying. Become blindfolded by placing a paper bag over the head and then feel various geometric shapes, letters, or numbers and identify each. Count by feeling an abacus or a row of tied knots while the eyes are closed. Close their eyes and reach into a shallow tub of water to select matching items found on the surface or on the bottom. Make various costumes from newspaper (a hula skirt, African warrior costumes, a dragon, fans); put them on; and dance or move according to their feelings.

Component: Perceptual Abilities–Coordinated Movements (Eye-Hand; Eye-Foot)

Teacher-directed activities

Realize that coordinated movements refer to the execution of more than one perceptual skill simultaneously. (Note that many of the activities described in this book call for coordinated movements. Those activities will not be repeated here.) Provide many combined lessons that emphasize various coordinated movements because students will need to develop gross and fine motor skills to pursue learning challenges effectively.

Have students make hand shadows and act out the various shapes they have made.

Have students go through the ball-handling progressions previously described in the section on throwing and catching and striking an object without an implement.

Have students drop clothespins into a milk carton and play selected table games that require finger dexterity. Have them play Jump the Shot, in which a beanbag is tied to the end of a long rope and the teacher stands in the middle of a circle of students and rotates the rope 360 degrees, gradually higher and higher, so that the students will have to jump over the rope. Have the students follow footprint and handprint obstacle courses set up on the outside courts; walk balance boards and complete a variety of activities; play a number of different hopscotch games; and jump rope in many novel ways. Have the students play with *footsie boards* (boards with an uneven fulcrum upon which students can place a beanbag, step hard on the short end, and pop the object up to catch it); or have the students go through the ball-handling progressions found under task-oriented activities.

Have students ride tricycles or bicycles around an obstacle course, stopping at various stations to perform activities found on task cards or "silly cards." Plan so that these activities call for coordinated movements.

Task-oriented activities

Challenge students to go through ball-handling progressions:

Move the ball around your body; in and out of the space around your legs; over your head; behind your back; around your head.

Bounce the ball to yourself; from place to place with one hand; with alternating hands; around your body; around and in and out of obstacles; under your leg and over your leg.

Bounce the ball high ahd low; with one hand; with the other hand; while clapping; two times between each bounce; in all directions. Don't lose control.

Catch a rolling ball; a ball coming right at you; a ball thrown too high, to the left, or to the right; a bouncing ball.

Stop or trap a kicked ball that is rolling on the ground; that is in the air.

Throw a ball to yourself in many different ways; throw it to a partner; play catch and don't miss ten times in a row.

Throw a ball back and forth to a partner while a third person tries to intercept (going into the middle if the opponent touches the ball).

Kick a stationary ball straight; kick a moving ball with control; kick a moving ball from place to place (dribble).

Bat a ball back and forth with a partner over a line; play twosquare, foursquare.

Hit the ball into the air so that a partner can catch it; hit the ball so that a partner can hit it back; continue to rally by volleying the ball.

Hit the ball under control with another part of the body (heading as in soccer).

Knock down milk cartons or bowling pins by rolling a ball from a gradually increasing distance.

Play a safe game of tag or dodge ball with several balls; with one ball.

Shoot baskets; center and pass a football; punt.

APPENDIX

The following appendix is an important portion of **Adapting Physical Education: A Guide to Individualizing Physical Education**. The appendix is divided into three sections.

The first section, pages 102-120 gives the title and indicates area, grade level and category of material listed in the left column of each page. The right column of the first section gives the page of the second section (pages 121-155) where a more detailed description of the material can be found.

The third section (page 156) lists and gives descriptions of programs that have proven successful in providing physical education for students who cannot participate fully in the regular program. Certainly this is not an exhaustive list of good programs, however, three programs have been validiated by the U.S. Office of Education and promoted as effective means of individualizing physical education.

TITLE	SUBJECT												COMPONENTS													LEVEL					PAGE
Audio-Visual Materials Children's Books Instructional Materials	Aquatics	Body Image	Directionally	Eye-Hand Coordination	Fine Motor	Gross Motor	General Phys.Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Activity Cards	Apparatus-Equipment	Book	Cassette	Duplicating Master	Flannel Board	Filmstrip	Game	Manipulative	Record	Student Film	Study Print	Transparencies	Pre-school	Elementary	Secondary	Post School	Not Specified	
Action Songs and Rhythms for Children						X			X		X				X												X				133
Activities for Physical Fitness																															
Part 1									X							X						X								X	121
Part 2									X							X						X								X	121
Activity Center				X	X	X															X					X					134
Adaptive Motor Learning Techniques for Children						X	X		X													X				X	X				121
All About Square Dances with Calls and Instrumental											X											X						X			121
American Indian Dances											X											X					X	X			121
And the Beatles Go On and On			X		X	X					X											X					X				122
Baby Action Ball					X	X															X					X					134
Baby Activator				X	X	X															X					X					134
Back Up Three				X	X															X							X	X	X		134
Balance Disk						X								X												X	X	X	X		134

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Basic Motor and Ball Skills						X					X											X				X	X				121
Basic Songs for Exceptional Children, Vol. 1,2,3		X							X													X								X	122
Be Ba Bo		X																X									X				122
Beginning To Learn Fine Motor Skills					X								X								X					X					135
Body Concept Spirit Masters		X															X									X	X				135
Body Concept Spirit Masters II		X															X									X	X				135
Body Image-Laterality		X															X									X	X				135
Body Parts Dice Game		X																		X						X	X				136
Body Position Cards		X											X													X	X				135
Carnival in Motion						X					X											X				X	X				122
Chicken Fat									X													X								X	122
Children's Body Awareness and Movement Exercises		X				X					X											X				X	X				123
Children's Dance Time						X					X											X				X	X				123

TITLE	SUBJECT												COMPONENTS													LEVEL					PAGE
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Children's Dance Using Rhythm						X					X											X					X				123
Children's Dances Without Partners						X					X											X				X	X				123
Coordination Skills				X																	X	X					X				136
Dance-A-Long						X					X											X					X				123
Dance-a-Story At the Beach						X					X											X					X				123
Dance-a-Story Balloons						X					X											X					X				124
Dance-a-Story Brave Hunter						X					X											X					X				124
Dance-a-Story Flappy & Floppy						X					X											X					X				124
Dance-a-Story Little Duck						X					X											X					X				124
Dance-a-Story Magic Mountain						X					X											X					X				124
Dance-a-Story Noah's Ark						X					X											X					X				124
Dance-a-Story The Toy Tree						X					X											X					X				124
Dance Record with Partners						X					X											X					X	X			124
Dance Steps-Dances Without Partners						X					X											X				X	X				124

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Dances for Little People						X					X											X				X	X				124
Dear Kurt								X															X				X	X			124
Deca-Grip Ball				X		X															X					X	X				136
Developing Everyday Skills for Early Childhood and Special Education through Movement and Songs																															
#1						X					X											X				X	X				124
#2						X					X											X				X	X				124
#3						X					X											X				X	X				124
#4						X					X											X				X	X				124
#5						X					X											X				X	X				124
#6						X					X											X				X	X				124
Directional Mat		X	X			X								X												X	X				136
Eye-hand Integration Exercises 1				X	X									X												X	X				137
Eye-hand Integration Exercises 2				X	X									X												X	X				137
Frostig Move, Grow and Learn					X	X				X				X												X	X				137
Fun Activities for Fine Motor Skills				X	X											X						X				X	X				124
Fun & Fitness						X																X					X				125

TITLE	SUBJECT												COMPONENTS													LEVEL					PAGE
Audio-Visual Materials Children's Books Instructional Materials	Aquatics	Body Image	Directionally	Eye-Hand Coordination	Fine Motor	Gross Motor	General Phys.Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Activity Cards	Apparatus-Equipment	Book	Cassette	Duplicating Master	Flannel Board	Filmstrip	Game	Manipulative	Record	Student Film	Study Print	Transparencies	Pre-school	Elementary	Secondary	Post School	Not Specified	
Hand Rhythms					X						X											X								X	125
Hand Right				X	X	X								X																X	137
Harmon Walking Rail and Visual Target						X								X																X	137
Health and Safety: Keeping Fit									X							X	X		X									X			125
Heel, Toe, Away We Go						X					X											X				X	X				125
Honor Your Partner Album 14									X		X											X					X				126
Honor Your Partner Album 15									X		X											X					X	X			126
Hop Skip and Sing						X			X		X				X												X				134
Human Body Parts		X																X									X				126
Learn To Swim Part I & II	X																		X								X	X			126
Learning About Me and the Way I Move					X	X																X					X				126
Learning By Singing and Doing		X				X																X					X				126
Let's Move!/What Do You See?											X					X			X								X				127

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Audio-Visual Materials Children's Books Instructional Materials	Aquatics	Body Image	Directionally	Eye-Hand Coordination	Fine Motor	Gross Motor	General Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Activity Cards	Apparatus-Equipment	Book	Cassette	Duplicating Master	Flannel Board	Filmstrip	Game	Manipulative	Record	Student Film	Study Print	Transparencies	Pre-school	Elementary	Secondary	Post School	Not Specified	
Listening and Moving										X												X								X	127
Listening and Moving						X				X												X					X				127
Long Magic Stretch Rope with Waist Loops						X								X													X				138
Look'n Do						X				X			X																	X	138
Magic Circular Stretch Rope						X								X																X	138
Motor and Hand-Eye Coordination-Left to Right				X	X	X											X								X		X				127
Motor Perceptual Learnings										X														X		X					127
Move Along Alphabet						X					X											X				X	X				127
Music for Physical Fitness						X			X													X								X	128
My Face and Body		X																X								X					128
1-2-3 and Move						X					X											X					X				128
Pathway School Program			X	X		X																					X				138
Physical Fitness for Preschool Children									X		X											X				X					128

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Audio-Visual Materials Children's Books Instructional Materials	Aquatics	Body Image	Directionally	Eye-Hand Coordination	Fine Motor	Gross Motor	General Phys.Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Activity Cards	Apparatus-Equipment	Book	Cassette	Duplicating Master	Flannel Board	Filmstrip	Game	Manipulative	Record	Student Film	Study Print	Transparencies	Pre-school	Elementary	Secondary	Post School	Not Specified	
Physical Fitness for Primary Children									X		X											X				X					128
Pillo Polo						X			X			X		X																X	138
Play All Activity Toy						X								X												X	X				138
Play and Learn, Games and Dance Set											X											X					X				129
Play and Learn, Rhythmes Set											X											X					X				129
Play Tunnel - Tunnel of Fun						X								X												X	X				139
Pound-A-Ball				X		X															X					X					139
Pound-a-Picture				X		X															X					X					139
Pre-Dance Activities									X		X										X					X	X				129
Pre-Physical Education Through Music						X			X		X											X					X				129
Pre-Square Dance											X											X				X	X				129
Pre-Square Dance Vol. 2						X					X											X					X				129
Rhythm Band and All Purpose Music						X					X											X				X					130

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Audio-Visual Materials Children's Books Instructional Materials	Aquatics	Body Image	Directionally	Eye-Hand Coordination	Fine Motor	Gross Motor	General Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Activity Cards	Apparatus-Equipment	Book	Cassette	Duplicating Master	Flannel Board	Filmstrip	Game	Manipulative	Record	Student Film	Study Print	Transparencies	Pre-school	Elementary	Secondary	Post School	Not Specified	
Rhythm Stick Activities		X			X	X					X											X								X	130
Rhythm Time						X					X											X				X	X				130
Rhythmic Parachute Play						X					X			X								X					X	X			139
Rhythms For Group Activities						X					X											X					X				130
Ring Toss				X		X				X				X												X	X	X	X		139
Rope Jumping And Ball Handling						X																X					X				130
Sensorimotor Training In The Classroom		X	X			X			X													X								X	131
Shoot The Moon					X					X				X												X	X	X	X		139
Shuttle Loop				X		X				X				X																X	140
Simplified Folk Dance Favorites For Exceptional Children											X											X								X	131 131
Sing Along - Do Along Activities Vol. 1					X						X											X				X	X				131
Singing Games						X					X											X				X	X				131
Singing Games - Album II						X					X											X				X	X				131

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Singing Games And Folk Dances Album III						X					X											X				X	X				131
Singing Square Dances - Album I						X					X											X					X				132 132
Singing Square Dances - Album II						X					X											X					X	X			132
Singing Square Dances - Album III						X					X											X					X	X			132
Sing 'N Do Carousel Of Songs Album 10						X					X											X					X				132
Skip Rope						X					X											X					X				132
Songs Of The Seasons And Resting Music And Original Children's Activity Songs						X					X											X					X				132
Sponge Balls				X		X				X				X												X	X				140
Square Dancing For Children						X					X											X				X	X				132
Swing Your Partner						X					X											X					X				133
Teen Age Diet, Nutrition, Exercise									X							X			X								X	X			133

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Tinikling/Authentic Philippine Dance						X			X		X			X								X					X	X	X		140
To Move Is To Be						X					X											X				X	X				133
Toss And Total - Concentric Pattern				X		X				X										X							X	X			140
Toss And Total - Ice Cream Cone				X		X				X										X							X	X			140
Toss And Total - Target				X		X				X										X							X	X			140
Words And Movement About Myself And Musical Games						X					X											X				X					133

TITLE	SUBJECT											EXCEPTIONALITY								COMPONENTS						PAGE
Professional Materials	Aquatics	Body Image	Eye-Hand Coordination	Fine Motor	Gross Motor	Genereral Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Autistic	Deaf and Hard of Hearing	Emotionally Disturbed	General Ed.	Learning Disabilities	Mentally Retarded	Physically Handicapped	Visually Handicapped	Activity Cards	Book	Cassettes	Filmstrips	Manipulatives	Professional Film	Video Tape	
Action	X	X	X	X	X	X	X	X	X	X	X				X						X						141
Active Learning: Games To Enhance Academic Abilities						X									X						X						141
Adaptive Physical Education For The Mentally Retarded					X												X				X						141
Advanced ERCAPEP (Educational Research Council Of America Physical Education)	X				X		X	X		X	X				X					X							141
Aids For Teaching The Mentally Retarded/Perceptual Training									X								X								X		141
Aids For Teaching M.R. Motor Training					X												X								X		141
Approaches To Learning: Motor Skills					X										X							X	X				141
Cast No Shadow						X								X			X	X							X		142
Children's Dance										X					X						X						142
A Curriculum Guide For The Development Of Body Vnd Sensory Awareness For The Visually Impaired		X																	X		X						142

TITLE	SUBJECT											EXCEPTIONALITY								COMPONENTS							PAGE
Professional Materials	Aquatics	Body Image	Eye-Hand Coordination	Fine Motor	Gross Motor	Genereral Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Autistic	Deaf and Hard of Hearing	Emotionally Disturbed	General Ed.	Learning Disabilities	Mentally Retarded	Physically Handicapped	Visually Handicapped	Activity Cards	Book	Cassettes	Filmstrips	Manipulatives	Professional Film	Video Tape	
Curriculum Guide Middle Schools High Schools					X												X				X						142
Dance A Folk Song										X					X						X						142
Development Through Action: Early Childhood Education: General Physical Education					X										X						X						143
Development Through Action: The Physically Handicapped; The Retarded Child					X													X			X						143
Developmental Activities For Children In Special Education						X									X						X						143
Developmental Games For Physically Handicapped Children					X													X			X						143
Developmental Physical Training For Better Motor Functioning				X	X										X						X						143
A Dream To Grow On							X										X								X		143

TITLE	SUBJECT											EXCEPTIONALITY								COMPONENTS							PAGE
Professional Materials	Aquatics	Body Image	Eye-Hand Coordination	Fine Motor	Gross Motor	Genereral Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Autistic	Deaf and Hard of Hearing	Emotionally Disturbed	General Ed.	Learning Disabilities	Mentally Retarded	Physically Handicapped	Visually Handicapped	Activity Cards	Book	Cassettes	Filmstrips	Manipulatives	Professional Film	Video Tape	
Early Intervention For Handicapped Children Through Programs Of Physical Education And Recreation						X									X						X						144
Educational Rhythmics For Mentally And Physically Handicapped Children					X					X							X	X			X						144
ERCAPEP (Educational Research Council Of America Physical Education)	X	X	X	X	X	X	X	X	X	X	X				X					X							144
Fun And Fitness Through Elementary Physical Education					X			X							X						X						144
Fun With Parachutes					X				X	X					X										X		144
Games And Activities For Early Childhood Education						X									X						X						145
Games For Special Days						X									X						X						145
A Guide For Programs In Recreation And Physical Education For The Mentally Retarded	X	X	X	X	X	X	X	X	X	X	X						X				X						145
Guide To Information Systems						X									X						X						145

TITLE	SUBJECT											EXCEPTIONALITY								COMPONENTS							PAGE
Professional Materials	Aquatics	Body Image	Eye-Hand Coordination	Fine Motor	Gross Motor	Genereral Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Autistic	Deaf and Hard of Hearing	Emotionally Disturbed	General Ed.	Learning Disabilities	Mentally Retarded	Physically Handicapped	Visually Handicapped	Activity Cards	Book	Cassettes	Filmstrips	Manipulatives	Professional Film	Video Tape	
Guidelines For Professional Preparation Programs For Personnel Involved In Physical Education And Recreation For The Handicapped						X									X						X						145
Handbook For Recreation						X									X						X						145
Homemade Innovative Play Equipment					X										X						X						146
Hop, Skip, And Sing					X					X					X						X						146
I Can (Physical Education Program) - Aquatics	X														X					X	X						146
I Can (Physical Education Program) - Body Management		X		X	X										X					X	X						146
I Can (Physical Education Program) - Fundamental Skills					X			X							X					X	X						146
I Can (Physical Education Program) - Health And Fitness					X			X							X					X	X						146
Image					X									X			X								X		147

TITLE	SUBJECT											EXCEPTIONALITY									COMPONENTS							PAGE
Professional Materials	Aquatics	Body Image	Eye-Hand Coordination	Fine Motor	Gross Motor	Genereral Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Autistic	Deaf and Hard of Hearing	Emotionally Disturbed	General Ed.	Learning Disabilities	Mentally Retarded	Physically Handicapped	Visually Handicapped	Activity Cards	Book	Cassettes	Filmstrips	Manipulatives	Professional Film	Video Tape	
Indoor And Outdoor Games						X									X						X						147
Indoor Games For All Grades					X			X							X						X						147
Jumping Up And Down					X				X						X						X						147
Karnes Early Language Activities				X	X										X					X							147
Learning And Playing - Fifty Vigorous Activities For The Atypical Child					X											X					X						148
Learning Through Play						X									X						X						148
Motor Fitness Testing Manual For The Moderately Mentally Retarded					X			X									X				X						148
Motor Skills Development Laboratory, Complete Program			X						X						X						X			X			148
Movement Experiences For The Mentally Retarded Or Emotionally Disturbed Child					X									X			X				X						148
Movement Exploration					X										X										X		148

TITLE	SUBJECT											EXCEPTIONALITY								COMPONENTS							PAGE
Professional Materials	Aquatics	Body Image	Eye-Hand Coordination	Fine Motor	Gross Motor	Genereral Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Autistic	Deaf and Hard of Hearing	Emotionally Disturbed	General Ed.	Learning Disabilities	Mentally Retarded	Physically Handicapped	Visually Handicapped	Activity Cards	Book	Cassettes	Filmstrips	Manipulatives	Professional Film	Video Tape	
Nature Games And Activities						X									X						X						149
The New Challenge	X	X	X	X	X	X	X	X	X	X	X						X				X						149
A New Kind Of Joy							X								X										X		149
100 Blackboard Games						X									X						X						149
Physical Education And Recreation For Cerebral Palsied Individuals						X												X			X						149
Physical Education And Recreation For Impaired, Disabled, And Handicapped Individuals: Past, Present, Future						X									X						X						150
Physical Education And Recreation For Individuals With Multiple Handicapping Conditions						X											X	X			X						150
Physical Education And Recreation For The Visually Handicapped	X	X	X	X	X	X	X	X	X	X	X								X		X						150
Physical Education Curriculum Resource Units - A Teacher's Manual		X	X		X			X	X	X	X				X						X						150

TITLE	SUBJECT											EXCEPTIONALITY								COMPONENTS							PAGE
Professional Materials	Aquatics	Body Image	Eye-Hand Coordination	Fine Motor	Gross Motor	Genereral Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Autistic	Deaf and Hard of Hearing	Emotionally Disturbed	General Ed.	Learning Disabilities	Mentally Retarded	Physically Handicapped	Visually Handicapped	Activity Cards	Book	Cassettes	Filmstrips	Manipulatives	Professional Film	Video Tape	
Physical Education For Blind Children						X		X											X		X						150
Physical Education For The Educable Mentally Retarded						X											X				X						151
Physical Education For The Handicapped						X												X			X						151
P.E. - Lever To Learning					X			X									X								X		151
Physical Education, Recreation, And Related Programs For Autistic And Emotionally Disturbed Children						X						X		X							X						151
Physical Education, Recreation And Sports For Individuals With Hearing Impairments						X							X								X						151
Play Activities For The Retarded Child						X											X				X						151
The Portage Guide To Early Education					X				X						X					X							152
A Practical Guide For Teacning The Mentally Retarded To Swim	X																X				X						152

TITLE	SUBJECT											EXCEPTIONALITY									COMPONENTS							PAGE
Professional Materials	Aquatics	Body Image	Eye-Hand Coordination	Fine Motor	Gross Motor	Genereral Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Autistic	Deaf and Hard of Hearing	Emotionally Disturbed	General Ed.	Learning Disabilities	Mentally Retarded	Physically Handicapped	Visually Handicapped	Activity Cards	Book	Cassettes	Filmstrips	Manipulatives	Professional Film	Video Tape	
Principles And Methods Of Adapted Physical Education						X									X						X						152
Principles And Methods Of Adapted Physical Education And Recreation						X									X						X						152
Psycho-motor Behavior In Education And Sport - Selected Papers					X				X						X						X						153
Recreation And Physical Activity For The Mentally Retarded						X											X				X						153
Recreation For The Mentally Retarded: A Community Based Program						X											X				X						153
Recreation For The Mentally Retarded - A Handbook For Ward Personnel						X											X				X						153
Recreation For Retarded Teenagers And Young Adults						X											X				X						153
Resource Guide For Day Care Centers In Recreation And Physical Activities						X									X						X						153
Say It With Movement					X										X						X						154

TITLE	SUBJECT											EXCEPTIONALITY								COMPONENTS							PAGE
Professional Materials	Aquatics	Body Image	Eye-Hand Coordination	Fine Motor	Gross Motor	Genereral Phys. Ed.	Individual and Dual Sports	Physical Fitness	Perceptual Motor	Rhythm	Team Sports	Autistic	Deaf and Hard of Hearing	Emotionally Disturbed	General Ed.	Learning Disabilities	Mentally Retarded	Physically Handicapped	Visually Handicapped	Activity Cards	Book	Cassettes	Filmstrips	Manipulatives	Professional Film	Video Tape	
See What I Can Do! A Book Of Creative Movement					X			X							X						X						154
Special Olympics Parts I And II						X	X	X									X									X	154
Swimming For Children With Physical And Sensory Impairments	X																	X	X		X						154
Teacher's Almanack (Practical Ideas For Every Day Of The School Year)						X									X						X						154
Teacher's Handbook Of Classroom Programs For Special Days						X									X						X						154
Teacher's Handbook Of Indoor And Outdoor Games						X									X						X						155
Teacher's Illustrated Handbook Of Stunts					X			X							X						X						155
Therapeutic Recreation Ideas And Experiences						X									X						X						155
Wings				X	X									X		X	X								X		155

ADAPTIVE PHYSICAL EDUCATION

AUDIO-VISUAL MATERIALS

Activities For Physical Fitness (189 mm)

A complete physical fitness program to develop desirable attitude toward the importance of health and proper exercise.

Author: Eye Gate Copyright: 1969
Publisher: Eye Gate
Jamaica, NY

Activities For Physical Fitness (Part II) (191 mm)

Complete physical education program which will increase muscle, strength, energy, coordination and activity in children. Set of three filmstrips and three records.

Author: Eye Gate Copyright: 1969
Publisher: Eye Gate
Jamaica, NY

Adaptive Motor Learning Techniques For Children (2883 R)

Body conditioning and corrective exercise - a tested program of sequenced floor exercises that provide a safe, easy approach to body conditioning. It uses adaptive motor learning techniques that both normal and special children can benefit from.

Author: Georgiana Liccione Stewart Copyright: 1976
Publisher: Kimbo Educational
P. O. Box 477
Long Branch, NJ 07740

All About Square Dances With Calls And Instrumental (2523 R)

This album comes up with highly practical group of square dance numbers, which include singing and cowboy dances, play party mixers, and square dance music without call. A teacher's manual is included.

Author: Folkways Records And Service Corp. Copyright: 1966
Publisher: Creative Playthings
Princeton, NJ 08540

American Indian Dances (2548 R)

Album presents an authentic presentation and interpretation of Indian Dances.

Publisher: Creative Playthings Copyright: 1959
Cranberry, NJ

Basic Motor And Ball Skills (2849 R)

To assist pre-kindergarten, kindergarten, and primary children in acquiring and developing basic motor skills and fundamental rhythms.

Publisher: Bowmar
622 Rodier Drive
Glendale, CA 91201

Basic Songs For Exceptional Children - Volume 1, 2, 3 (2768 R)

Twelve inch long-play records covers body image, basic nutrition, hygiene exercise, and rest.

Author: Concept Records
Publisher: Constructive Playthings
1040 E. 85th Street
Kansas City, MO 64131

Be Ba Bo (4097 FB)

Be Ba Bo is a body image unit made up of a series of 20 multi-sensory games, puzzles, action poems, and riddles used in conjuction with the 24 piece felt figure to build, expand and reinforce body image concepts. Contents: 1 flannel board, one felt figure with 24 body parts, and a teacher's manual.

Author: Estherdale Stephens, et al. Copyright: 1974
Publisher: Ideal
Oak Lawn, IL 60453

And The Beatles Go On And On (Record And Book) (2750 R)

Interest Level: Intermediate to Jr. High. Today's sound with today's tunes for a new and modern physical education program. The album contains two LP records with music and vocal commands on one side; music only on the other side. Completely illustrated teacher's manual prepared by Ambrose Brazelton.

Author: Ambrose Brazelton Copyright: 1971
Publisher: Kimbo Educational Records and
Educational Activities
Box 246
Deal, NJ 07723

Carnival In Motion - Basic Body Movements For Little People (2875 R)

Original songs, emphasizing simple, basic body movements involving the head, hands, arms and legs, makes movement exploration fun. One side of the album has music and lyrics, and the other music only. Guide included.

Author: William C. Janiak Copyright: 1975
Publisher: Kimbo Educational
P. O. Box 477
Long Granch, NJ 07740

Chicken Fat (2799 R)

Record calls for exercises to be done in conjunction with the President's Council of Physical Fitness.

Author: Meridith Wilson
Publisher: Frank Music Corp.
Jr. Chamber of Commerce
Tulsa, OK

Children's Body Awareness And Movement Exercises (2852 R)

Bob Kay uses original songs and techniques to teach children movement exploration. Parts of the body and rhythm exercises are introduced through original songs, stories, and games. 12' LP record.

Publisher: Stallman Educational Systems, Inc. Copyright: 1974
P. O. Box AL
Roslyn Heights, NY 11577

Children's Dance Time: For Primary Children (2801 R)

This record will help primary children improve their listening and direction following abilities. There are 3 folk rhythm dances on side one and 18 minutes of piano music on side two.

Author: Harold and Mary Jane LeCrone
Publisher: Instructor Publications, Inc.
Dansville, NY 14437

Children's Dance Using Rhythm Instructions (2885 R)

Combined disciplines of education, psychology, medicine, and dance have developed a new area of specialization, dance therapy. Techniques are simple, motivating, effective and easily adaptable for use by classroom teachers, special education specialists, physical education teachers, and remediation specialists..

Publisher: Educational Activities, Inc. Copyright: 1974
P. O. Box 392
Freeport, NY 11520

Children's Dances Without Partners (2838 R)

A no partner dance and rhythm activity album that both teacher and student will enjoy participating in. Original songs, dances and games.

Author: Lou Stallman Copyright: 1973
Publisher: Stallman Educational systems
P. O. Box AL
Roslyn Heights, NY 11577

Dance-A-Long (2641 R)

Album for kinesthetic activities.

Author: B. J. Walberg
Publisher: Educational Projections, Inc.
Jackson, MS

Dance-A-Story - Series (2858 R - 2865 R)

A storybook-record combination for beginning dance technique, for creative rhythms, pantomime, dramatic motivation. There are 10 books in addition to the record. The children can follow the instructions in the book to dance the story. One side of the record tells the story, the other side has the music without narration. Series as listed below.

Author: Paul and Anne Barlin
Publisher: RCA Music Service
1133 Avenue of the Americas
New York, NY 10036

At The Beach (2858 R)
Balloons (2859 R)
Brave Hunter (2860 R)
Flappy & Floppy (2861 R)
Little Duck (2862 R)
Magic Mountain (2863 R)
Noah's Ark (2864 R)
The Toy Tree (2865 R)

Dance Record With Partners (2803 R)

This is a piano-voice recording that presents original music to fit the Reel, Polka, Waltz, Schottische, and two Folk dances. The routines are simple to follow. They are repetitive and easy to learn.

Author: Harold and Mary Jane LeCrone
Publisher: Instructor Publications, Inc.
Dansville, NY 14437

Dances For Little People (2877 R)

A record of simple dance movements especially created for young children. Fully-orchestrated music and 6 original songs motivate children to move. Guide included.

Author: William C. Janiak Copyright: 1975
Publisher: Kimbo Educational
P. O. Box 477
Long Branch, NJ 07740

Dear Kurt (1037 SF)

A documentary dramatizing the actual experiences of one thirteen year old boy who represented his home town in the Soap Box Derby in Akron, OH. The film provides a thoughtful look at this American institution and a sensitive parable of life in a small town. 24 minute color film.

Publisher: Weston Woods
Weston, CT 06880

Developing Everyday Skills For Early Childhood And Special Education Through Movement And Song - Series (2743 R - 2748 R)

This series of albums will provide a variety of songs that concentrate on concepts. Each concept song provides an activity and the recordings cover areas such as: body care, language, expressions, animals, transportation, hygiene, counting, easy round dances, clothing, marching, and others. The electronic music will fascinate the children encouraging them to sing along, and stimulate them to participate actively. Side A is vocal and music. Side B is instrumental only. Series listed below.

Author: William C. Janiak Copyright: 1971
Publisher Kimbo Educational Records
Box 246
Deal, NJ 07723

#1 - 2743 R
#2 - 2744 R
#3 - 2745 R
#4 - 2746 R
#5 - 2747 R
#6 - 2748 R

Fun Activities For Fine Motor Skills (2867 R)

Designed to help children focus on developing fine motor skills. Exercises for fingers, eyes, and tongue are set to contemporary music. Exercises for eye-hand coordination are easily adaptable for use with finger and hand puppets. All these activities can be done seated. The instrumental side of the record can be used for many other activities. Illustrated manual.

Author: Kimbo Educational — Copyright: 1973
Publisher: Kimbo Educational
Box 246
Deal, NJ 07723

Fun Activities For Fine Motor Skills (3641 T)

Designed to help children focus on fine motor skills. They can be used to reinforce remediation programs, complement classroom projects, or in assembly programs. The music is popular and familiar to children. Effectiveness of these techniques is due to the simple repetitive and specific exercises necessary for the development of fine motor control. One side is vocal and instrumental and the other side is instrumental only.

Publisher: Kimbo Educational — Copyright: 1973
Box 477
Long Branch, NJ 07740

Fun And Fitness (2846 R)

This record includes twelve compositions. Selections are short, in keeping with growth and physical development of primary children. There are also four bands of music to assist children in building motor skills and motor coordination.

Author: David G. Rumbaugh — Copyright: 1966
Publisher: Bowmar
622 Rodier Drive
Glendale, CA 91201

Hand Rhythms (2787 R)

Excellent activity record for bedfast individuals, both children and adults particularly those who need to reestablish or strengthen hand and finger use or muscle control.

Author: Rhythm Record
Publisher: Rhythm Record Company
9203 Nicholas Road
Oklahoma City, OK 73120

Health And Safety: Keeping Fit (1236 MM)

Objective is to prepare students for the years beyond school by encouraging the development of responsibility and self-sufficiency. Includes spirit masters, teacher's guide, 4 filmstrips, and 4 cassettes.

Publisher: Butterick Publishing — Copyright: 1976
P. O. Box 1945
Altoona, PA 16603

Heel, Toe, Away We Go (2882 R)

Simple folk dance patterns through which one can teach young children basic coordination skills, four participants can learn a skill individually and then coordinate it into a simple fun activity. Side 1 includes narration and music. Side 2 is instrumental only. Manual included.

Author: Georgiana Liccione Stewart Copyright: 1976
Publisher: Kimbo Educational
P. O. Box 477
Long Branch, NJ 07740

Honor Your Partner Album 14 (2623 R)

Level: Primary Grades. Three recordings of physical fitness activities for primary grades which include talk through which includes directions and music.

Author: Top Hands
Publisher: Imperial Film Co., Inc.
Lakeland, FL

Honor Your Partner Album 15 (2622 R)

Level: grades 5-9. Seven recorded sides of physical fitness activities for the intermediate and junior high school including directions tune-up and easy to follow commands.

Author: Top Hands
Publisher: Imperaial Film Co., Inc.
Lakeland, FL

Human Body Parts (4086 FB)

Five large, 16" figures that illustrate relationships of body parts and clothing. Parts are pieced together to form figure. Name cards included to label parts. Multi-ethnic figures represent clothed bodies for summer and winter seasons. Flannel board teaching aids.

Publisher: Milton Bradley Copyright: 1971
Springfield, MA 01101

Learn To Swim Part I & II (237 FS)

Elem./Jr. High. Starting with a typical swimming class held in a neighborhood public swimming pool, a boy and a girl are followed through all the steps of learning to swim and to dive and to practice the rules of water safety.

Author Biley Films, Inc.
Publisher: Bailey Film Associates
Los Angeles, CA

Learning About Me And The Way I Move (2892 R)

Songs and activities to develop the areas of body movements, balance, and physical coordination and motor development. Record and teaching guide.

Author: Lynn Glaser Copyright: 1971
Publisher: Stallman Educational Systems, Inc.
P. O. Box AL
Rosyln Heights, NY 11577

Learning By Singing And Doing (2893 R)

Movement activities to help children to develop self-awareness. Record and study guide.

Author: Lynn Glaser Copyright: 1973

Publisher Stallman Educational Systems, Inc.
Box AL
Roslyn Heights, NY 11577

Let's Move! What Do You See? - Level 1, Programd D (947 MM)

Helps children to recognize rhythm in music and move in harmony with it. In "What Do You See?", children learn to recognize that people see objects and situations differently, depending on their point of view.

Author: Paul F. Brandwein Copyright: 1974
Publisher Harcourt Brace Jovanovich
757 Third Avenue
New York, NY 10017

Listening And Moving (2560 R)

This album provides a sequentially developed training program to help pupils establish necessary perceptual motor skills.

Author Educational Activities
Publisher Educational Activities
Freeport, NY

Listening And Moving (2566 R)

This album provides a training program to help the pupil establish an accurate awareness of his body and its position in space. Provides listening activities which in turn require physical action.

Author: Educational Activities
Publisher Educational Activities
Freeport, NY

Motor And Hand-Eye Coordination - Left To Right (2084 TR)

Twelve transparencies, 28 duplicating pages and teacher's guide. The lessons are divided into two parts. Part I assist the children to develop large and small muscle control and coordination. Part II develops eye-hand and picture reading coordination left to right.

Author: Dr. Frederick Venditti and Copyright: 1968
Evelyn Murray
Publisher: Donnelly's Teaching Aids, Inc.
Washington, D.C.

Motor Percpetual Learnings (3086 SP)

Ages 3-8 years. Flexible teaching suggestions are provided on the back of each picture.

Author: Bowmar Publishing Co.
Publisher: Bowmar Publishing Co.
Glendale, CA

Move Along Alphabet (2878 R)

A record combining physical education with learning. It teaches the alphabet through letter and word associtION while providing a wonderful tool for self expression through movement. The accompanying manual includes text and illustrated instructions.

Author: Maya Doray Copyright: 1976
Publisher: Kimbo Educational
P. O. Box 477
Long Branch, NJ 07740

Music For Physical Fitness (2847 R)

Sixteen original compositions with fully illustrated descriptions of activities for a complete physical conditioning course. Arm-shoulder development, leg development, trunk development, flexibility and coordination.

Author: Bowmar Copyright: 1963
Publisher: Bowmar
622 Rodier Drive
Glendale, CA 91201

My Face And Body (4101 FB)

27 pieces to assemble for study of the face and features - 49 pieces to assemble for study of parts of the body and their locations.

Author: Instructo
Publisher: Lehmer/Edu-care Services, Inc.
3710 Trindle Road
Camp Hill, PA 17011

1 * 2 * 3 And Move (2868 R)

Album 1 - Simply orchestrated original music for teaching basic skills. Slow teaching aid. Skip, gallop, march, tip toe, jump, hop. Waltz.

Album 2 - Fully orchestrated popular songs. Can be used for a variety of rhythmic activities including dance, trampoline, ball bouncing, singing, and clapping.

Author: Kimbo Educational Copyright: 1974
Publisher: Lehmer/Edu-care Services, Inc.
3710 Trindle Road
Camp Hill, PA 17011

Physical Fitness For Pre-School Children (2784 R)

Less regimented activities than those used with older children which still provide an introduction to directed activity.

Author: Rhythm Record
Publisher: Rhythm Record Company
9203 Nichols Road
Oklahoma City, OK 73120

Physical Fitness For Primary Children (2783 R)

Suggested exercises to promote physical fitness.

Author: Rhythm Record
Publisher: Rhythm Record
9203 Nichols Road
Oklahoma City, OK 73120

Play And Learn, Games And Dance Set (2593 R)

Reading level: primary. This record set contains music, activities, and directions concerning games and dances.

Author: Summit Industries
Publisher: Summit Industries
Highland Park, IL

Play And Learn Rhythmes Set (2589 R)

Reading level: primary. Interest level: pre-kindergarten. Subject: music. A group of records designed to teach coordination to younger children. Generally speaking these materials should be used in group activities.

Author: Summit Industries
Publisher: Summit Industries
Highland Park, IL

Pre-Dance Activities (2839 R)

This album is an introduction to elementary dance activities. Rhythm develops self-awareness, self-expression, self-improvisation, poise, coordination, and physical fitness.

Author: Lou Stallman Copyright: 1973
Publisher: Stallman Ed. Systems
P. O. Box AL
Roslyn Heights, NY 11577

Pre-Physical Education Through Music (2574 R)

Original songs - subjects include exercises for all parts of the body, the learning of rhythm, marches and games, encourage self-expression and physical development. These exercises can be used in a classroom as in a play area.

Author: Lou Stallman Copyright: 1972
Publisher: Charles W. Clark Co., Inc.
564 Smith Street
Farmingdale, NY 11735

Pre-Square Dance (2833 R)

Original songs to introduce children to the skills needed in group work and in organized dance activities - approaches children's natural response to rhythm and interesting sound. Easy-to-understand calls are on the record.

Author: Lou Stallman Copyright: 1971
Publisher: Stallman Ed. Systems, Inc.
P. O. Box AL
Roslyn Heights, NY 11577

Pre-Square Dance - Vol. 2 (2834 R)

This album is designed to get children involved in active physical movement and to introduce them to square dancing, square dance calling and to country and western yells and rhythms.

Author: Lou Stallman Copyright: 1973

Publisher: Stallman Educational Systems
P. O. Box AL
Roslyn Heights, NY 11577

Rhythm Band And All Purpose Music (2782 R)

Ten original descriptive melodies which may be used for drawing to music, or interpreted through body movements

Author: Rhythm Record
Publisher: Rhythm Record Co.
Oklahoma City, OK 73120

Rhythm Stick Activities (2850 R Gla)

Activities include gross and fine movements, body image, following directions, and coordination skills. The music is contemporary and adapted to the stick activities. Used creatively, rhythm sticks whether rolled up newspapers, Pla-tubes or Lummi sticks, can widen your perceptual motor program This album and manual gives music directions and new ideas for using Rhythm Sticks.

Author: Henry "Buzz" Glass, et al Copyright: 1974
Publisher: Educational Activities, Inc.
P. O. Box 392
Freeport, NY 11520

Rhythm Time (2608 R)

This record includes rhythm activities to use with rhythm instruments, and rhythms to use to walk, run, skip and tip toe. Mechanical rhythm of toys and clocks as well as circus playground and animals are included.

Author: Bowmar Records, Inc. Copyright: 1966
Publisher: Bowmar Records, Inc.
N. Hollywood, CA

Rhythms For Group Activities (2595 R)

This album consists of three 45 rpm disc together with a detailed instruction packet for, ball skills, routines, skiprope, marching, gymnastics and modern dance exercises.

Author: Creative Playthings
Publisher: Creative Playthings
Cranberry, NJ

Rope Jumping And Ball Handling (2848 R)

Music, which includes old favorites and new compositions, to assist in developing motor skills in primary children. Material is excellent for demonstration and program purposes. Rope jumping rhymes, mirror image activities, ball handling routines.

Author: David G. Rumbaugh
Publisher: Bowmar
622 Rodier Drive
Glendale, GA 92101

Sensorimotor Training In The Classroom (2773 R)

Body image, laterality, space, directionality, basic movement, physical fitness, ocular training, auditory discrimination.

Author: Educational Activities, Inc.
Publisher: Educational Activities, Inc.
P. O. Box 392
Freeport, NY 11520

Simplified Folk Dance Favorites For Exceptional Children (2887 R)

Utilizes a new recording technique which has been developed in order to provide a new approach to the teaching of exceptional children. To make learning easier, complete verbal instructions for each dance, as well as cues, are given on the record. Bands on the record between the selections are sufficiently wide to provide easy identification of the dance desired. 1) Lili Marlene, 2) Oh, Susanna, 3) Virginia Reel, and 4) LaRaspa.

Publisher: Educational Activities, Inc. Copyright: 1965
P O. Box 392
Freeport, NY 11520

Sing Along - Do Along Activities Vol. 2 (2903 R)

Ten innovative learning concepts in which children will enjoy participating. Circle dances, finger games, and resposive action games are all included. Guide included.

Author: Lou Stallman Copyright: 1976
Publisher: Stallman Educational Systems
P. O. Box AL
Roslyn Heights, NY 11577

Singing Games (2899 R)

Fourteen familiar children's songs coordinate movement and music to stimulate physical activity.

Publisher: Educational Manpower, Inc.
Box 4272E
Madison, WI 53711

Singing Games, Album II (2900 R)

Fifteen songs and simple dances stimulate primary children to use only the basic locomotor skills

Publisher: Educational Manpower, Inc.
Box 4272E
Madison, WI 54711

Singing Games And Folk Dances - Album III (2901 R)

Album of 16 games and folk dances stimulates children to use basic locomotor skills.

Publisher: Educational Manpower, Inc.
Box 4272E
Madison, WI 54711

Singing Square Dances - Album I (2896 R)

Verbal instructions before each dance and clear calls during each of the six songs helps stimulate coordinated body movements in children

Publisher Educational Manpower, Inc.
Box 4272E
Madison, WI 54711

Singing Square Dance - Album II (2897 R)

The second of this series contains six dances to promote coordinated body movements

Publisher Educational Manpower, Inc.
Box 4272E
Madison, WI 54711

Singing Square Dances - Album III (2898 R)

This third record in the series contains six songs with clear calls to stimulate physical coordination in children.

Publisher: Educational Manpower, Inc.
Box 4272E
Madison, WI 53711

Sing 'N Do Carousel Of Songs Album 10 (2685 R)

Designed for the pleasure of children in grades K-2. Children express their own interpretation of the songs story through creative rhythmic movement

Author: Sing 'N Do Company
Publisher: Sing 'N Do Company
Midland Park, NJ

Skip Rope (2615 R)

This album contains many songs and rhymes that students can jump rope to while developing coordination. Part of dm 813.

Author: Creative Playthings
Publisher: Creative Playthings
Princeton, NJ 08540

Songs Of The Seasons And Resting Music And Original Children's Activity Songs (2789 R)

Songs for activity and rest.

Author: Manning Records
Publisher: Manning Records

Square Dancing For Children (2835 R)

The main objective of this album is to introduce the concept of square dancing at an early age. It teaches children to follow directions, and to coordinate the movements of their hands and feet to specific musical rhythms and physical activities.

Author: Lou Stallman Copyright 1973

Publisher: Stallman Educational Systems
P. O. Box AL
Roslyn Heights, NY 11577

Swing Your Partner (2520 R)

This album is designed for square dancing activities in the elementary classroom.

Author: Folkways Records And Service Corp.
Publisher: Creative Playthings
Cranberry, NJ

Teen Age Diet, Nutrition, Exercise (953 MM)

Tells teenage girls how to build lifelong habits of good diet and exercise to keep their bodies attractive and healthy. 3 cassettes, and 6 filmstrips.

Author: Eye Gate
Publisher: Eye Gate
146-01 Archer Road
Jamaica, NY 11435

To Move Is To Be (2825 R)

20 basic locomotor and non-locomotor movements are imaginatively presented in jingle form in the guide, repeated on the record and followed by music selected for that particular movement. 2 records and a guide.

Author: JoAnn Seker, & Marilyn Rundle Copyright: 1971
Publisher: Kimbo Educational
Box 246
Deal, NJ 07723

Words And Movement About Myself And Musical Games (2781 R)

This record supplies more than sixty language concepts, including twenty-eight direct word opposites, which, when correlated with body movements, provide a very wonderful learning experience for children of all ages.

Author: Rhythm Record
Publisher: Rhythm Record Company
9203 Nichols Road
Oklahoma City, OK 73120

CHILDREN'S BOOKS

Action Songs And Rhythms For Children (372.8 Lun)

Song and rhythm work play a large part in the full development of the growing child. Health and physical fitness if promoted in the use of large muscle areas in the movements of running, leaping, jumping.

Author: Lois Lunt Metz Copyright: 1962
Publisher: L. B. Herr and Co.
Lancaster, PA

Hop, Skip And Sing (372.8 Lun)

This book is created on the assumption that children's music and body rhythm experiences should be closely correlated, and the creative side of the child cultivated.

Author: Lois Lunt Copyright. 1959
Publisher: L B. Herr and Co.
Lancaster, PA

INSTRUCTIONAL MATERIALS

Activity Center - For Crib And Playpen (6249 IM)

Ten fun things for baby to do Parts are all made of though plastic. Fastens to crib or playpen.

Author: Fisher-Price Copyright 1973
Publisher: Kaplan School Supply Corp.
600 Jonestown Road
Winston-Salem, NC 27103

Baby Action Ball (6258 IM)

A plastic ball to push and roll. It contains an hourglas with bright plastic granules to sift back and forth. Designed to provide easy grasping through the large openings along the outside

Author: Playskool
Publisher: Creative Educational Distributor
159-163 E Lancaster Avenue
Wayne, PA 19087

Baby Activator (6248 IM)

Infant music maker and eye-hand trainer. A pull of either cord activates gentle musical sound with bell or clapper. To be hung on crib.

Author: Creative Playthings
Publisher: Kaplan School Supply Corporation
600 Jonestown Road
Winston-Salem, NC 27103

Back Up Three (Delux) (4553 IM)

An old German game called "Man Don't Get Mad" The object is to send 4 marbles all the way around the board from starting point to your home base. Throw dice to determine number of moves forward a three sends you back three spaces. For 2, 3, or 4 players. Solid cherry size 4" x 15" fits together into cross shape for playing, comes apart for compact storage

Author: Warren & Mary Lea Bailey
Publisher: World Wide Games, Inc.
Box 450
Delaware, OH 43015

Balance Disk (4514)

Encourages physical exercise necessary to develop coordinated motor skills and muscular activity. Generous in size the platform permits sitting, kneeling, and standing exercises which promote good body alignment and total stability of balance. The platform can be rocked in any predetermined direction or in a circular movement. Safety treads are provided and a carefully designed 27" tilt assures maximum safety.

Author: Ideal School Supply Co. Copyright: 1970
Publisher: Ideal School Supply Co.
Oak Lawn, IL

Beginning To Learn Fine Motor Skills (6165 or 143A)

Sixty lessons, sequentially organized by difficulty of task, activities to change little hands that are all thumbs into nimble fingers. The activities are: cutting, tracing, connecting dots, aiming, coloring, pasting, completing figues. Materials include a workbook, templates and tracing boards. Time required is 15-20 minutes per lesson. Curriculum readiness includes writing, and other areas requiring precise eye-hand coordination. Transparencies for overhead projector and teacher's guide.

Author: Dr. Thelm Thurstone, and Copyright: 1970
Dr. D. Lillie
Publisher: Science Research ssociates, Inc.
259 E. Erie Street
Chicago, IL 60611

Body Concept Spirit Masters (No. P-154) (Front View) (55B)

These quality imprinted spirit masters on the concept of missing body parts offer an invaluable aid to the student in recognition of a missing body part such as the arm, neck, foot, leg, etc. The student is asked to complete the picture by drawing in the missing part on his copy sheet.

Publisher: Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648

Body Concept Spirit Masters II (No. P-187) (Rear And Side View) (56B)

These quality imprinted spirit masters on the concept of missing body parts offer an invaluable aid to the student in recognition of a missing body part such as the arm, hand, neck, foot, leg, etc. The student is asked to complete the picture by drawing in the missing part on his copy sheet.

Publisher: Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648

Body Image - Laterality (280 A)

This set enables the students to learn left-right orientation in relation to body orientation. Exercises are varied, and involve identification of body parts in various positions. Concepts taught in this set are essential preludes for later, more complex, educational tasks. Set includes 22 duplicating masters.

Author: Jon & Janet Frazier and Copyright: 1970
Dennis Hill
Publisher: Ideal School Supply Co.
Oak Lawn, IL 60453

Body Parts Dice Game (257B IM)

Designed as a highly motivational tool for teaching and reinforcing the names of 21 important body parts. Components: playing board, 35 plastic ships, 1 pair of dice and instructions for playing.

Publisher: DLM Copyright: 1976
7440 Natechz Avenue
Niles, IL 60648

Body Position Cards (208 A)

The goal of this program is promotion of self-awareness and the development of sensorimotor skills. Many of the simple, yet valuable activities that were commonplace in the past have all but disappeared. Few children today have the opportunity to balance atop a fence rail or to walk a railroad track, Hoops and tires are seldom rolled. We can not leave to chance those activities which are so important to later perceptual and conceptual development.

Author: Robert R. Schmoll Copyright: 1973
Publisher: NYT Teaching Rsources Corp.

Coordination Skills: Rhythmic Eye-Hand Patterned Movement Activities (4518)

Educational movement activities which utilize popular tunes for training and reinforcement. The use of soft, bright-colored yarn balls eliminates the fears of younger boys and girls, and noises which disturb others. The first record is geared for the progression skills of the K-3 grades, the second is for 4-6 grades. On the second side of each record patterned movement activities and simple props are suited to the individual abilities and capabilities for each grade level.

Author: Harold Hissam Copyright: 1969
Publisher: Kimbo Educational
Deal, NJ

Deca-Grip Ball (4554 IM)

A hollow 3-1/2" ball of soft plastic, brightly colored for the poorly coordinated student or the student with inadequate musculature to catch a ball. The design provides 10 equivalent grip positions.

Publisher: Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648

Directional Mat (209A)

The Directional Mat is an oil cloth mat, printed with a numbered grid. The Mat is used on the floor as a "game" to make spatial and directional concepts meaningful by isolating a portion of space and makint it visable. In all his movements on the Mat, the student remains partially in touch with a center outline of a pair of shoes. Thus, the Mat has directional stability for the student. An important tool for both prevention and remediation of problems of body image, laterality, and directionality.

Author: Patricia M. Koehler
Publisher: NYT Teaching Resources

Eye-Hand Integration Exercises - Set I (44B)

The purpose of the Eye-Hand Integration Exercises is to establish firmly the students knowledge of left and right and up and down and to improve his fine motor control viuso-motor integration skills.

Publisher: Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648

Eye-Hand Integration Exercises - Set II (105 B)

The purpose of the Eye-Hand Integration Exercises is to establish firmly the students knowledge of left and right and up and down and to improve his fine motor control and visuo-motor integration skills.

Author: Charlotte E. Larson, M.A.
Publisher: Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648

Frostig - MGL - Move - Grow And Learn (4520)

Grade Level: K-P Description: A new movement education program is designed to enhance the perceptual-motor development of young children. Intended for pre-school and primary grades, MGL may contribute to the development of their sensory-motor skills, self-awareness, awareness of time and space, ability to communicate and interact with others, ability to solve problems and to learn. The program activities are printed on color-coded 6" x 4" cards placed in convenient storage file. Activities include body awareness, coordination, agility, strength, balance and creative movement. May be used by classroom teachers and physical education specialists.

Author: Marianne Frostig Copyright: 1971
Publisher: Follett Publishing Company
1010 W. Washington Blvd.
Chicago, IL 60607

Hand Right (139B)

An apparatus that trains the motor movements of the shoulder, arm, wrist, fingers and eyes in such a way as to make writing more easily learned and, therefore, highly reinforcing. Consists of 1 metal stand with 2 metal straight bars. One metal curve bar, metal loop bar, 1 large wooden ball, 1 wooden peg, 1 double-faced writing surface, and 1 metal extension bar.

Publisher: Motor Skills Research, Inc. Copyright: 1974
712 Inverness Drive
Horsham, PA 19044

Harmon Walking Rail And Visual Target (4508)

Walking rail serves to promote good body alignment and helps develop efficient stato-kinetic reflex functioning. The visual target is a method of logical relationship between various points in the visual field and specific body position.

Author: Ideal School Supply Co.
Publisher: Ideal School Supply Co.
Oak Lawn, IL

Long Magic Stretch Rope With Wasit Loops (4521)

Author: Physical Education Supply
Association, Inc.
Publisher: Physical Education Supply
Association, Inc.
600-4 Main Street
Monroe, CT 06468

Look 'N Do - Body Movement Activity Cards (170B)

Sixteen cards provide a unique way to combine healthful muscle activity with listening and direction-following skill-building experiences. Activities will work well with an entire class or with a small group of children. Cards provide reinforcement in preceptual-motor, physical development and listening skill areas.

Author: Trend Enterprises Copyright: 1974
Publisher: Media For Education
13208 W. Washington Blvd.
Los Angeles, CA 90066

Magic Circular Stretch Rope (Heavy Duty) (4522)

Author: Physical Education Supply
Association, Inc.
Publisher: Physical Education Supply
Association, Inc.
600-4 Main Street
Monroe, CT 06468

Pathway School Program (4529 IM)

The program helps to develop body awareness, directionality, simultaneous coordination of both hands, and judgment of the amount of body movement and force for accurate directional control. Concepts of sequence, quantity, numbers and counting are emphasized in supplementary games and activities.

Publisher. New York Times Teaching Recources
100 Boylston Street
Boston, MA 02116

Pillo Polo (4552 IM)

The rules for Pillo Polo are adopted from hockey rules, with an objective of keeping the game simple and safe and fun. For maximum stick life play, the game is best played on grass surfaces or gym floors. Equipment for 12 participants.

Publisher: Newtoys, Inc.
3271 N. Cramer Street
Milwaukee, WI 53211

Play-All Activity Toy (4523 IM)

Three curved sections to be used as a multi-play unit. Can be used to form a circle, a reclining seat, or whatever a child's imagination wills. 1 orange, 1 blue, 1 green section in set.

Publisher: Childcraft
150 E. 58th Street
New York, NY 10022

Play Tunnel (4517)

Versatile, lightweight, can be used indoors or out, as a tunnel, snake, tent, or whatever. 24" diameter, opens to 10' in length with heavy duty cover made especially for schools, over 3/16" tempered spring coil. Collapses into 27" square, 2" thick package.

Author: Rapco
Publisher: Lakeshore Curriculum Materials
Los Angeles, CA

Pound-A-Ball (6244 IM)

This unique pounding toy provides hours of fun. When ball is pounded into bench, it reappears, rolls down and rests in trough on front of bench. Children enjoy repeating the action over and over again. 1 wooden toy bench with holes, 4 colored balls, 1 wooden hammer.

Author: Creative Playthings
Publisher: Media for Education
13208 W. Washington Blvd.
Los Angeles, CA 90066

Pound-A-Picture (6292 IM)

A creative pounding board which makes a picture while it develops eye-hand coordination. Laminated chip-board pieces includes policeman, stop sign, traffic light and assorted vehicles. Safe plastic hammer, plastic nails become wheels.

Publisher: Creative Ed. Distributors
159 E. Lancaster Avenue
Wayne, PA 19087

Rhythmic Parachute Play (Parachute With Manual And Record) (4522 IM)

Parachute centered activities based on manual and record. For elementary and secondary use.

Author: Seker and Jones   Copyright: 1969
Publisher: Cole Supply Co.
103 East Bird Street
Pasadena, TX 77502

Ring Toss (4506)

For ages 4-adult. A simple game for every age.

Author: Milton Bradley Co.
Publisher: Lakeshore Curriculum Materials
San Leandro, CA

Shoot The Moon (4528 IM)

Roll a 1-1/4" steel ball "up hill" by manipulating the steel rods. Game requires manual skill and can be played by all ages. All hardwood construction (usually maple) with steel rods and ball. 18 inches long.

Author: Warren & Mary Lea Bailey
Publisher: World Wide Games, Inc.
Box 450
Delaware, OH 43015

Shuttle Loop (4502)

Author: Creative Playthings
Publisher: Creative Playthings
Princeton, NJ

Sponge Balls (6242 IM)

Provides beneficial activity for children whose poorly developed visual motor skills make them fearful of being hurt by a thrown ball. May be used safely indoors.

Publisher: Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648

Tinkling - Authentic Philippine Dance (4524 IM)

A record and 6 bamboo poles used in this original folk dance. The guide on the record jacket provides instructions in the dance and the use of the poles.

Author: Carmencita Kazan
Copyright: 1972
Publisher: Kimbo Educational
Box 246
Deal, NJ 07723

Toss And Total (4550 IM)

Dart board designed for perceptual motor development. Three light weight balls with velcro strips cause the balls to attach to the target when thrown.

Publisher: Science for the Blind Products
221 Rock Hill Road
Bala-Cynwyd, PA 19004

Toss And Total - Ice Cream Cone (4527)

Toss and Total can be used in eye-hand integration exercises, as a high-interest math game, or simply as recreation, perhaps as a part of a reward system. This intriguing target game is available in a choice of targets - an Ice Cream Cone (with scoring areas) and abstract circles (which are scoring areas).

Publisher: Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648

Toss And Total - Target (4526)

Toss and Total is a new kind of target game in which lightweight balls are used in place of pointed darts. The Velcro-covered board has several scoring areas. The three colorful balls, also Velcro-covered, are thrown at the target and adhere to it on impact. Can be used in eye-hand integration exercises, as a high-interest math game, or simply as recreatiion, perhaps as a part of a reward system.

Publisher: Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648

PROFESSIONAL MEDIA

Action (372.8 Roy)

A handbook for teachers of elementary physical activities.

Author: Mary M. Roy Copyright: 1967
Publisher: Educational Services, Inc.
Stevensville, MI

Adaptive Physical Education For The Mentally Retarded (652 PMM)

Slides-Cassette program filmed at Oberlin Center, Harrisburg, shows profoundly mentally retarded children engaged in physical education activities to improve gross motor skills.

Author: Oberline Center Capital Area Intermediate Unit
Publisher: Oberline Center Capital Area Intermediate Unit
Harrisburg, PA

Active Learning: Games To Enhance Academic Abilities (793.4 Cra)

Here's a unique guidebook brimming with over 100 active learning games to help develop a smooth running, effective learning environment. For one child or fifty - at every level of intelligence, physical ability, maturity, and motivation. These games will improve recognition of geometric figures, numbers, letters and symbols; enhance memory, left-right discrimination, and ability to take and follow orders. Increase arithemtical skills. Improve and enrich reading for understanding, etc.

Author: Bryant J. Cratty Copyright: 1971
Publisher: Prentice-Hall, Inc.
Englewood, NJ

Advanced ERCAPEP (Educational Research Council of America Physical Education Program) (613.7 DeS)

The complete Advanced ERCAPEP (for secondary level) is a boxed kit of 1200, 5" x 8" cards, including activities for Team Sports, Individual and Dual Sports, Rhythms, Gymnastics, Aquatics, Physical Fitness, and Evaluation. Each card is coded as to activity area and developmental sequence position. A program guide and an activities chart are included.

Author: Gabriel J. DeSantis and Lester Smith Copyrignt: 1974
Publisher: Charles E. Merrill Pub., Co.
1300 Alum Creek Drive
Columbus, OH 43216

Aids For Teaching The Mentally Retarded/Perceptual Training (502 PF)

This film deals with motor perceptual training card and is designed for professional use with teachers.

Author: Thorne Films
Publisher: Thorne Films
Boulder, CO

Approaches To Learning: Motor Skills (1014 PMM)

Designed for use by teachers both new and experienced who want an effective review of the basic skills involved in early learning. They have application in in-service workshops, paraprofessional training, parent orientation, college courses, and individual teacher study materials. Each filmstrip is self-contained and may be used independently.

Publisher: Teacher Resources Corp. Copyright: 1972
200 Boylston Street
Boston, MA 02116

Cast No Shadow (1100 PF)

A motion picture which vividly depicts a wide variety of recreation activities for severely mentally retarded, physically handicapped, multi-handicapped and emotionally disturbed children, teens, and adults. Emphasis is placed upon the value of recreation and its effect upon the lives of the handicapped.

Publisher: Professional Arts, Inc.
P. O. Box 8003
Stanford, CA 94305

Children's Dance (790 Fle)

A new book designd to show how dance can be used in the classroom in lively, innovative ways. Appropriate for the classroom teacher as well as the specialist in dance and physical activities, covers such topics as dance as an expression of feelings, folk and ethnic contributions, dancing for boys, composing dance and dance in the school.

Author: Gladys Andrews Fleming Copyright: 1973
Publisher: AAHPERD Publications-Sales
1900 Association Drive
Reston, VA 22091

A Curriculum Guide For The Development Of Body And Sensory Awareness For The Visually Impaired (375.7)

This guide is to help the visually impaired student become proficient in the pre-cane skills area by having the educator refer to the appropriate section for materials, activities and references, and to use these data as a guide from which to build upon his knowledge and experiences.

Publisher: Illinois Office of Education Copyright: 1974
100 North First Street
Springfield, IL 62706

Curriculum Guide Middle Schools High Schools (375-56)

This guide includes four areas: functional skills, life sciences and social skills, physical development, and career awareness and social studies.

Publisher: Cobb County Public Schools Copyright: 1975
47 Wadde Street
Marietta, GA 40060

Dance A Folk Song (372.8 Bar)

Designed for teachers of kindergarten and primary students, this volume gives step-by-step instructions for choreographing ten dances plus two records to accompany the dances. The story behind each song is given, then each dance is broken into its basic elements for easy instruction.

Author: Anne & Paul Barlin Copyright: 1974
Publisher: Bowmar Publishing Corp.
622 Rodier Drive
Glendale, CA 91201

Development Through Action: Early Childhood Education, General Physical Education (372.6 Cra)
The activities are intended to provide an environment whereby the objects equipment and shapes incorporated in these activities when used properly will enhance the intellectual as well as the academic abilities of the children who come in contact with them.

Author: Bryant J. Cratty Copyright: 1973
Publisher: Skill Development Equip. Co.
1340 N. Jefferson
Anaheim, CA 92806

Development Through Action: The Physically Handicapped, The Retarded Child (372.6 Cra)
The first section deals with the activities and physical arrangement of equipment which may promote progress for the younger more severely handicapped child. The next section outlines activities for the child with moderate problems.

Author: Bryant J. Cratty Copyright: 1973
Publisher: Skill Development Equip. Co.
1340 N. Jefferson
Anaheim, CA 92806

Developmental Activities For Children In Special Education (371.91 Hir)
This text is for teachers whose training is in the field of special education with no specialization in physical education.

Author: Cynthia Hirst & Elaine Michaelis Copyright: 1972
Publisher: Charles C. Thomas

Developmental Games For Physically Handicapped Children (790.019 Cra)
These games take into consideration the problem of the wide range of movement difficulties of physically handicapped children.

Author: Bryant J. Cratty Copyright: 1969
Publisher: Educational Activities, Inc.
Freeport, NY

Developmental Physical Training For Better Motor Functioning (790.19 Aux)

Author: David Auxter Copyright: 1969
Publisher: Western Pennsylvania Special
Education
Regional Resource Center

A Dream To Grow On (779 PF)
This film tells the story of the 1968 Special Olympics in Chicago where 1,000 mentally retarded children competed for coveted medals in running, jumping, swimming and other "Olympic" events.

Author: Joseph P. Kennedy Jr. Foundation
for Special Olympics Inc.
Publisher: Bone Film Service

Early Intervention For Handicapped Children Through Programs Of Physical Education And Recreation (790.19 AAH)

Focuses on early intervention of handicapped children under the age of six years through active participation in physical education and recreation programs. Includes history of early intervention programs, growth and development processes of children, integration of handicapped and non-handicapped pre-schoolers, and programs available.

Author: AAHPERD Copyright: 1976
Publisher: AAHPERD Publication Sales
1900 Association Drive
Reston, VA 22091

Educational Rhythmics For Mentally And Physically Handicapped Children (790.019 Rob)

A practical, test program of exercises for remedial recreation, with step-by-step illustrations.

Author: Ferris and Jennet Robins Copyright: 1963
Publisher: Association Press
New York, NY

ERCAPER (Education Resource Council of America Physical Education and Recreation) (613.7 Edu)

Enables any teacher to create an educational elementary school physical education program. 800 activity cards provide almost unlimited possibilities for an organized sequential course in physical education, so essential for young children. Each 5" x 8" card is coded for the teacher's convenience and for maximum use, by color, letter and number to designate areas, position in sequence and subdivision of a major area.

Author: Educational Research Council Copyright: 1969
of America
Publisher: Charles E. Merrill Publishing Co.

Fun And Fitness Through Elementary Physical Education (613.7 Bry)

Physical fitness in elementary education can be fun. Games, warm-ups, movement exploration, physical procedures, etc.

Author: Roaslie Bryant Copyright: 1967
Publisher: Parker Publishing Co.
West Nyack, NY

Fun With Parachutes (878 PF)

"Fun With Parachutes" gives a visual presentation of selected parachute activities that add a new, exciting dimension to all levels of the physical education program.

Author: Documentary Films
Publisher: Documentary Films
3217 Trout Gulch Road
Aptos, CA 95003

Games And Activities For Early Childhood Education (793)
Pre-school through primary. Excellent reference for Headstart personnel.

Author: Wagner, et al Copyright: 1930
Publisher: Dick Blick
Galesburg, IL

Games For Special Days (793 Cra)
Nearly 140 games for special days and holidays through the school year. Includes learning experiences, emphasizing language arts and social studies, plus physical activities. Arranged by month for all grade levels.

Author: Dorothy E. Cram Copyright: 1963
Publisher: Instructor (F. A. Owen
Publishing Co.)
Dansville, NY

A Guide For Programs In Recreation And Physical Education For The Mentally Retarded (790.01 AAH)
Objectives, ideas and suggestions for what might be included in a comprehensive program of physical education and recreation for the mentally retarded.

Author: American Alliance for Health, Copyright: 1968
Physical Education,
Recreation and Dance
Publisher: American Alliance for Health,
Physical Education,
Recreation and Dance
1900 Association Drive
Reston, VA 22091

Guide To Information Systems (790.19 AAH)
A guide to the programs and information available for physical education and recreation for impaired, disabled, and handicapped persons.

Author: American Alliance for Health, Physical
Education, Recreation and Dance
Publisher: U.S. Department of Health, Education,
and Welfare
Washington, DC 20202

Guidelines For Professional Preparation Programs For Personnel Involved In Physical Education And Recreation For The Handicapped (790)
These guidelines are developed and finalized through a process that involved 120, physical educators, recreation specialists, etc.

Publisher: HEW Copyright: 1973

Handbook For Recreation (790 Hew)
Handbook for recreation of children in the U.S

Author: U.S. Department of Health, Copyright: 1960
Education, and Welfare
Publisher: U.S. Department of Health,
Education, and Welfare
Washington, DC 20202

Homemade Innovative Play Equipment (372.21 AAH)

A guide for homemade innovative play equipment for activities in physical education and recreation for impaired, disabled, and handicapped participants.

Author: Council for Exceptional Children
Publisher: The Council for Exceptional Children
1920 Association Drive
Reston, VA 22091

Hop, Skip, And Sing (737.21 Lun)

Twenty-five songs and rhythms based on the interests and activities of children.

Author: Lois Lunt   Copyright: 1959
Publisher: Constructive Playthings
1040 E. 85th Street
Kansas City, MO 64131

I Can (Physical Education Program) - Aquatics (613.7 Wes)

Swimming provides a resource for the development of a positive self-concept, physical fitness, independence and a sense of safety. This package includes the basic water adjustment skills, basic strokes and self-rescue skills, which provide the child with prerequisites to acquiring other more advanced aquatic skills. Contents: 2 notebooks, teacher's guide, record sheets, and games.

Author: Janet Wessel   Copyright: 1976
Publisher: Hubbard
P. O. Box 104
Northbrook, IL 60062

I Can (Physical Education Program) - Body Management (613.7 Wes)

Contains the elements necessary for the student's motor and cognitive development through student-centered activity programs and many learning achievements associated with other subject areas (art, numbers, language, music, and self-help skills). Contents: 2 notebooks, teacher's guide, record sheets, 44 game cards.

Author: Janet A. Wessel   Copyright: 1976
Publisher: Hubbard
P. O. Box 104
Northbrook, IL 60062

I Can (Physical Education Program) - Fundamental Skills (613.7 Wes)

An individualized instructional system, this set accommodates each child at his own level of performance. Instruction focuses on the student's ability and helps him build on these abilities at his own pace. Contains: 2 notebooks, 2 progress pads, teacher's guide, and 2 pkg. games.

Author: Janet Wessel   Copyright: 1976
Publisher: Hubbard
P. O. Box 104
Northbrook, IL 60062

I Can (Physical Education Program) - Health And Fitness (613.7 Wes)

The development of physical fitness is as important to the special child as it is to the normal child. In gaining the fitness components of muscular strength, stamina, flexibility and relaxation, and child develops a basis for engaging in a wide variety of physical activities and movement experiences. Includes: 2 notebooks, teacher's guide, record sheets, and games.

Author: Janet Wessel Copyright: 1976
Publisher: Hubbard
P. O. Box 104
Northbrook, IL 60062

Image (902 PF)

Film developed by the Devereux Foundation and shows emotionally disturbed and neurologically impaired children participating in many motor development activities.

Author: The Devereux Foundation
Publisher: The Devereux Foundation
208 Lancaster Road
Devon, PA 19333

Indoor And Outdoor Games (372.8 B)

This book is designed to be a handy reference for the teacher or recreation leader looking for games suitable to particular elementary grade levels.

Author: William G. Bentley Copyright: 1966
Publisher: Fearon Publishers
Palo Alto, CA

Indoor Games For All Grades (796.54 Cot)

Group games, combative activities, hopscotch games, relay games, individual stunts, and calisthenics.

Author: Boyice J. Cotten Copyright: 1972
Publisher: Instructor Publications, Inc.
Dansville, NY 14437

Jumping Up And Down (372.6 Abe)

A manual of motor activities to develop balance and coordination.

Author: Kathleen Abernathy, et al Copyright: 1970
Publisher: Academic Therapy Publications
1539 4th Street
San Rafael, CA 94901

Karnes Early Language Activities (372.21 Kar)

A sequenced program for children functioning at the 18 to 36 month level. Two hundred lesson cards with one thousand activities, color-coded by four skill areas: motor, visual, auditory, verbal. There is a guide to facilitate the use of the program.

Author: Merle B. Karnes Copyright: 1975
Publisher: Young World Products
P. O. Box 433
Clinton, TN 37716

Learning And Playing - Fifty Vigorous Activities For The Atypical Child (790.019 Cra)

This book offers a variety of active games which provide reasonable challenges and yet are simple enough to encourage participation by immature children and those with learning disabilities.

Author: Bryant J. Cratty Copyright: 1969
Publisher: Educational Activities, Inc.
Long Island, NY

Learning Through Play (372.21 Mar)

Translates the findings of professional educators into a series of play activities for your children. Suggests ways for parents to enrich their youngsters emotional and intellectual development in the home.

Author: Jean, Janice, & Lloyd Marzollo Copyright: 1972
Publisher: Harper and Row, Publishers
10 East 53rd Street
New York, NY 10022

Motor Fitness Testing Manual For The Moderately Mentally Retarded (371.92 Joh)

Provides teachers, supervisors, and parents with tests and norms for assessing physical fitness levels of moderately mentally retarded children.

Author: Leon Johnson & Ben Londeree Copyright: 1976
Publisher: AAHPERD Publication Sales
1900 Association Drive
Reston, VA 22091

Motor Skills Development Laboratory, Complete Program (1116 PMM)

The Motor Skills Development Laboratory provides a multisensory approach to the development of perceptual, motor, and handwriting skills. The program is based on the Magic Square. Composed of a square, circle, and triangle, the Magic Square contains all the strokes needed to make any manuscript letter or any numeral.

Publisher: Educational Progress Copyright: 1972
P. O. Box 45663
Tulsa, OK 74145

Movement Experiences For The Mentally Retarded Or Emotionally Disturbed Child (371.91 Mor)

This text has been written as a tool for use by the educator in providing individualized and meaningful movement experiences for those children in our society who are mentally retarded, or emotionally disturbed.

Author: Joan May Moran & Leonard Kalakian Copyright: 1974
Publisher: Burgess Publishing Company
Minneapolis, MN

Movement Exploration (904 PF)

Presents children at the pre-school and elementary level participating in a variety of gross motor activities. Although the activities are well organized emphasis is placed on having the child scatter before they perform the required task. Children are frequently encouraged to originate their own adaptations to a particular activity. Many of the activities, although designed for elementary children would be appropriate for secondary TMR and EMR students.

Author: Documentary Films
Publisher: Documentary Films
3217 Trout Gulch Road
Aptos, CA 95003

Nature Games And Activities (796.5 Cas)
Reading level: intermediate grades. Interest level: Jr. High. Subject: recreation. Description: Here are games and things to do using nature's materials just outside the door.

Author: Sylvia Cassell   Copyright: 1956
Publisher: Harper and Row
New York, NY

The New Challenge (371.92 Pen)
This publication provides an overview of mental retardation among children and the effects that planned physical education and recreation experiences may have upon them. The contents are directed to special education teachers, administrators, parents, etc. to encourage new programs of activity or to revitalize existing ones.

Author: PA Department of Education   Copyright: 1976
Publisher: PA Department of Education
333 Market Street
Harrisburg, PA 17126

A New Kind of Joy (1128 PF)
A film which depicts the value and meaning of Special Olympics, and captures the courage and determination of its young athletes.

Publisher: Special Olympics, Inc.
1710 K Street, N.W.
Suite 203
Washington, DC 20006

100 Blackboard Games (793.7 Lan)
A prize colletion of 140 games. Many are learning experiences based on language arts and social studies and others involve physical activity.

Author: Leslie Landin   Copyright: 1956
Publisher: School Service
Los Angeles, CA

Physical Education And Recreation For Cerebral Palsied Individuals (790.19 AAH)
Deals with information and resources in physical education and recreation for cerebral palsied individuals Covers such topics as nature and causes of the condition, recreational activities, music, art and dance.

Author: AAPHERD   Copyright: 1976
Publisher: AAHPERD Publication Sales
1900 Association Drive
Reston, VA 22091

Physical Education And Recreation For Impaired, Disabled, And Handicapped Individuals: Past, Present, Future (371.9 AAH)

A systematic collection, analysis and synthesis of research data, empirical evidence, program information, and various resource materials in recreation/therapeutic recreation and physical education/adapted physical education for disabled individuals.

Author: AAHPERD
Publisher: AAHPERD Publications
1900 Association Drive
Reston, VA 22091

Physical Education And Recreation For Individuals With Mutliple Handicapping Conditions (371.9 AAH)

Contains a brief analysis of literature, abstracts, and information on physical education and recreation for individuals with multiple conditions. Sections are presented that include examples of related programs, reference resource contacts, and audiovisual aids.

Author: American Alliance for Health,
Physical Education, Recreation and Dance
Publisher: AAHPERD Publication Sales
1900 Association Drive
Reston, VA 22091

Physical Education And Recreation For The Visually Handicapped (613.7 Bue)

This valuable resource includes information on the nature of visual impairments practical suggestions for active participation in modified programs, and successful, easy-to-administer instructional methods. A variety of sources are suggested for further reference, study and use.

Author: Charles E. Buell Copyright: 1973
Publisher: American Alliancefor Health,
Physical Education,
Recreation and Dance
1900 Association Drive
Reston, VA 22091

Physical Education Curriculum Resource Units - A Teacher's Manual (375-46 Gen. Sp. Ed.)

Contains suggestions for balance activities, body awareness activities, spatial awareness activities, muscular strength activities, rhythmic and dance activities, group activities, testing and measurement of individuals and sample units for indoor and outdoor activities.

Author: James D. Zabel Copyright: 1971
Publisher: Discorvery Through Outdoor
Education

Physical Education For Blind Children (371.91 Bue)

Describes a well-rounded program of vigorous physical education including sports, games, contests, races, and relays. With this book, even an inexperienced teacher can conduct physical activities for visually handicapped children.

Author: Charels E. Buell Copyright: 1966
Publisher: Charles C. Thomas
301-327 E. Lawrence Avenue
Springfield, IL 62727

Physical Education For The Educable Mentally Retarded (790 Tuc)

Just as special methods of instruction in academic subjects help retarded children achieve optimum mental growth, so special methods of instruction in physical education assist these students in attaining maximum physical development.

Author: Mark M. Tucker — Copyright: 1969
Publisher: Southern Illinois University
Edwardsville, IL

Physical Education For The Handicapped (371.91)

The purpose of this book is to aid those who see satisfaction in educating the atypical child and better preparation for this chosen task in introduction of therapeutic exercise and physical education and nervous system are brought forth.

Author: Ruth Wheeler & Agnes Hooley — Copyright: 1969
Publisher: Lee and Febiger
Philadelphia, PA

P.E. - Lever To Learning (796 PF)

Shows educable mentally retarded boys and girls from a public school special education program taking part in a program emphasizing development of motor skills and physical fitness.

Author: Stuart Finley Inc.
Publisher: Stuart Finley Inc.

Physical Education, Recreation, And Related Programs For Autistic And Emotionally Disturbed Children. (790.19 AAH)

Primarily a resource guide providing information about physical education, recreation, art, dance, music and drama for autistic and emotionally disturbed children. Also includes a brief description of 16 current programs available for these children.

Author: AAHPERD — Copyright: 1976
Publisher: AAHPERS Publication Sales
1900 Association Drive
Reston, VA 22091

Physical Education, Recreation And Sports For Individuals With Hearing Impairments (790.19 AAH)

Designed for both physical educators and recreation personnel with no background in dealing with hearing impaired persons, as well as those who have experience with this population but not with physical education or recreation.

Author: AAHPERD — Copyright: 1976
Publisher: AAHPERD Publication Sales
1900 Association Drive
Reston, VA 22091

Play Activities For The Retarded Child (371.92 Car)

Most retarded children like to play; and when they play, says the author, "they not only have fun, but usually develop physically, mentally, and socially, frequently beyond the realm of general expectation". This book is a psychologically and educationally sound aid. When parent or teacher has mastered it, he will know how to look for and use other material that will help the retarded child in his care and develop into a useful person.

Author: Bernice Wells Carlson, et al Copyright: 1961
Publisher: Children's Music Center, Inc.
5373 West Pico Blvd.
Los Angeles, CA 90019

The Portage Guide To Early Education (372.21 Por)

A developmentally formulated curriculum to be used with children, either handicapped or normal, between the mental ages of birth to five years. These materials can be used regardless of the specific handicapping condition, the instructional delivery system, the reacher/child ratio, or the professional status of the instructor. It has two parts: a checklist of behaviors and a card file containing curriculum ideas. These materials were developed and utilized by the "Portage Project" staff over a period of four years. The checklist and card file are color coded and divided into five developmental areas: cognitive, self-help, motor, language, socialization.

Author: Portage Project Copyright: 1972
Publisher: Portage Project
Cooperative Educational Service
Agency 12 (Box 564)
412 E. Slifer Street
Portage, WI 53901

A Practical Guide For Teaching The Mentally Retarded To Swim (790 AAH)

Organizing and administering the program, methods, teaching progressions, stunts and games, pool facilities, behavior modification techniques and a selected bibliography.

Author: AAHPERD Copyright: 1969
Publisher: AAHPERD Publication Sales
1900 Association Drive
Reston, VA 22091

Principles And Methods Of Adapted Physical Education (613.7 Arn)

In general, the basic organization of this text is designed to lead the student from general to more specific concepts. There are three major divisions: background and foundation, condicting the program, and understanding specific disabilities.

Author: Daniel Arnheim, et al Copyright: 1969
Publisher: C. V. Mosby
St. Louis, MO

Principles And Methods Of Adapted Physical Education And Recreation (613.7 Arn)

Encompassing the full spectrum of handicapping conditions, this new edition has been reorganized to reflect current advances in methods of teaching adapted physical education. New material has been added on the developmental process, a prerequisite to the individualization of instruction. Sections discussing aphasia and autism have been expanded, and new aquatic exercises and activities are included:

Author: Daniel Arnheim, et al Copyright: 1977
Publisher: C. V. Mosby Company
3301 Washington Blvd.
St. Louis, MO 63103

Psycho-motor Behavior In Education And Sport - Selected Papers (613.7 Cra)

This text contains papers delivered on a variety of topics relating psycho-motor activity to both the athletic scene and therapeutic strategies and programs. Also includes discussions of visual-perceptual behaviors, the role movement plays in various educational programs, as well as essays dealing with intelligence in movement education programs as well as in athletics.

Author: Bryant J. Cratty Copyright: 1974
Publisher: Charles C. Thomas
301-327 E. Lawrence Avenue
Springfield, IL 62717

Recreation And Physical Activity For The Mentally Retarded (790 AAH)

Designed programs for the MR in recreation and physical activity.

Author: AAHPERD Copyright: 1966
Publisher: National Association for
Retarded Children
New York, NY

Recreation For The Mentally Retarded: A Community Based Program (371.91 Bir)

A three year report of a research and demonstration project. Community Recreation Resources for the Retarded.

Author: Arnold Birenbaum & Arthur Schwartz
Publisher: National Association For Retarded
Children
New York, NY

Recreation For The Mentally Retarded - A Handbook For Ward Personnel (790 Shr)

Designed for ward personnel this book gives insight into patients and their needs in their environment.

Author: SREB Recreation Committee Copyright: 1964
Publisher: National Association for
Retarded Children
New York, NY

Recreation For Retarded Teenagers And Young Adults (790.019 Car)

This book summarizes basic social and physical needs of retardates at this age level. It outlines methods and techniques for meeting these needs through music, games, parties, sports, hobbies, and other activities.

Author: Bernice Wells Carlson and Copyright: 1968
David R. Ginglend
Publisher: Abingdon Press
Nashville, TN

Resource Guide for Day Care Centers In Recreation & Physical Activities (790 Car)

This guide is concerned with the following monthly themes: Self-Awareness, Health, Self-control, Socialization, Civic Responsibility, Vocation, and Outdoor Education.

Author: Dr. Dorothy Carr, et al.
Publisher: University of Kentucky Regional Special
Education IM Center

Say It With Movement (790 E11)
Every child wants to move, to express himself through movement, and every child can do so gracefully with a little help from this book.

Author: Linda Ellefson Copyright: 1973
Publisher: Media for Education
13208 W. Washington Blvd.
Los Angeles, CA 90066

See What I Can Do! A Book of Creative Movement (790 Dor)
This is a collection of 144 simple activities that help young children devlop muscles, increase coordination, express feelings, and use imagination in exploring the world around them. They can be performed indoors or outdoors and require no special clothing or equipment.

Author: Maya B. Doray Copyright: 1973
Publisher: Prentice-Hall, Inc.
Englewood Cliffs, NJ

Special Olympics Parts I & II (5500 VT)
Videotape of this Olympic style competition for the handicapped.

Author: Goodwin and Norris
Publisher: West Chester State College
West Chester, PA

Swimming For Children With Physical And Sensory Impairments (613.7 New)
Book presents techniques and technical know-how for the use of swimming, aquatics and water sports in therapy, recreation, and fun. Personalized methods for teaching the handicapped to swim are presented which will be useful to teachers who are new in the field. Practical suggestions are given for dealing with physical and emotional problems.

Author: Judy Newman Copyright: 1976
Publisher: Charles C. Thomas
301-327 E. Lawrence Ave.
Springfield, IL 62717

Teacher's Almanack (790.02 New)
Deskbook provides a wealth of stimulating teaching ideas and materials that will lighten the teacher's classroom load. Ideas cover the full range of the elementary curriculum, from arithmetic and reading, to art, physical education, and creative writing. Each one has been tested with children and is ready to be used at once to inject new interest, new challenge, and new enthusiasm into classes.

Author: Dana Newmann Copyright: 1973
Publisher: Center for Applied Research
in Education, Inc.
521 Fifth Avenue
New York, NY 10017

Teacher's Handbook Of Classroom Programs For Special Days (394 Dev.)
There are a variety of activities to help you enrich your classroom program by utilizing holidays and special events in creative and innovative ways. The scope is broad and includes

ideas, materials and methods for traditional schools or nongraded. Each unit proves pertinent facts, suggestd activities lesson plans and a bibliography with references to additional resource information.

Author: Joseph C. DeVita, et al Copyright: 1973
Publisher: Parker Publishing Co., Inc.
West Nyack, NY

Teacher's Handbook Of Indoor And Outdoor Games (790 Edg)

Games, stunts, sports and group activities that make spelling, reading, arithmetic exciting fun and that develop traits of fair play, leadership and team spirit.

Author: Harry Edgren & Joseph Gruber Copyright: 1963
Publisher: Educator's Book Club
Englewood Cliffs, NJ

Teacher's Illustrated Handbook of Stunts (793 Orl)

Spiral-bound volume of healthful, entertaining activities: mimetics, calistenics, individual stunts, dual stunts and group activities -old favorites as well as new activities - all of which can be performed in the limited space of the classroom or expanded for use on the playground, and no special apparatus is needed.

Author: Emanuel Orlick & Jean Mosley Copyright: 1963
Publisher: Prentice-Hall, Inc.
Englewood Cliffs, NJ

Therapeutic Recreation Ideas and Experiences (613.7 Rob)

Therapeutic recreation is written for therapists, teachers, administrators, leaders, activity directors, camp counselors, nurses, social workers and all other individuals interested in providing humanistic services to people with special needs.

Author: Frank M. Robinson, Jr. Copyright: 1974
Publisher: Charles C. Thomas, Publisher
301-327 E. Lawrence Avenue
Springfield, IL 62717

Wings (902 PF)

Film developed by the Devereaux Foundation and shows emotionally disturbed and neurologically impaired children participants in many motor development activities.

Author: The Devereux Foundation
Publisher: The Devereux Foundation
208 Lancaster Road
Devon, PA 19333

Several programs have been nationally validated as effective tools in helping teachers individualize physical activity programs for students with handicapping conditions. Three such programs are listed and described below:

Project Every Child A Winner

Every Child A Winner is designed to improve fitness, motor skills and self-concepts for grades K-6. The intention is for every child to be successful regardless of physical ability. The program helps develop concepts of space awareness, body awareness, quality of movement and relationships using the discovery-learning-teaching method.

Contact: Martha F. Owens, Director
Every Child A Winner
Box 141
Ocilla, GA 31774

Project Success

Project Success provides individualized physical education and psychomotor traning for the child with a specific language disability. The program emphasizes the relation of movement to learning in areas of muscular strength, dynamic balance, body awareness, spatial awareness and temporal awareness with the goal of developing efficient and effective use of the body.

Contact: Richard Metteer, Director
Wayne Middle School
312 Douglas
Wayne, Nebraska 68787

Project ACTIVE

Project ACTIVE provides teacher training in programming for children who have low motor ability, low physical vitality, postural abnormalities, nutritional deficiencies, learning disabilities, breathing problems, motor disabilities or limitations and communication disorders.

Contact: Thomas M. Vodola
Township of Ocean School District
Dow Avenue
Oakhurst, NJ 07755

Additionally, a wide variety of information on programs for students with handicapping conditions is available from the Information and Research Utilization Center of the American Alliance for Health, Physical Education and Recreation. To learn more about their services write to Julian Stein, Director of IRUC, APHPERD, 1201 16th Street, NW,
Washington, DC 20036.

SAMPLE
Physician's Referral Form

ANY SCHOOL DISTRICT HEALTH
AND PHYSICAL EDUCATION DEPARTMEN

Dear Doctor:

The State Board of Education requires every pupil to participate in some form of physica education. The range and latitude of the Health and Physical Education Program in any city is so varied that every pupil able to be in school can derive benefit from some phase of the program. Special programs have been developed for those pupils who are no able to participate safely or successfully in the unrestricted activities of the regula program. This program offers a diversified program of developmental activities, games, sports, and rhythms suitable to the capacities and limitations of pupils with disabilit Daily classes of approximately ____ minutes, with about ____ minutes of undressing, showering, and dressing leave around ____ minutes for actual activity. Please complete this form to assist us in planning a program best suited to the pupil's needs.

______________________________, Superintende

NAME ______________________________ SCHOOL ______________________________

ADDRESS ______________________________ GRADE & SECTION ______________________

TELEPHONE NUMBER ______________________

Diagnosis or Description of the Condition

Severity of the Condition ☐ -chronic; ☐ -acute; ☐ -permanent; ☐ -temporary
Other (specify)

Anticipated Date Pupil May Return to Unrestricted Activity ______________, 19______

Date Pupil Should Return for Reexamination ______________________, 19______

FUNCTIONAL CAPACITY

☐ -Unrestricted - no restrictions need be placed on the pupil relative to vigorousness or type of activity

☐ -Restricted - pupil's condition is such that the intensity and type of activity need to be limited (check one category below)

  ☐ -Mild - ordinary physical activity need not be restricted, but unusually vigorous efforts need to be avoided

  ☐ -Moderate - ordinary physical activity needs to be moderately restricted and sustained strenuous efforts need to be avoided

  ☐ -Limited - ordinary physical activity needs to be markedly restricted

ANATOMICAL ANALYSIS

Indicate body areas in which physical
activity should be minimized or eliminated - -

Remarks:

	Minimized	Eliminated	Both	Left	Right
Neck					
Shoulder Girdle					
Arms					
Hands and Wrists					
Abdomen					
Back					
Legs					
Knees					
Feet and Ankles					
Other (specify)					

☐ -REMEDIAL - Pupil's condition is such that defects or deviations can be improved or prevented from becoming worse through the use of carefully selected exercises. The following are types of exercises recommended for this pupil's condition: (Please be specific)

Signed ______________________________, M.D.

Address ______________________________

____

Telephone Number ______________________

Date ____________________________, 19____

Distributed by: American Alliance for Health, Physical Education, Recreation & Dance
1900 Association Drive
Reston, Virginia 22091